









## Parent & Teacher Guide

This Parent and Teacher Guide is designed to help you support your student's learning. The information presented in this guide is based on the course content at the time of printing. Occasionally, the online version of your course may change slightly, but the tips in the Parent and Teacher Guide are designed to broadly cover the course's content.

This guide is arranged in lesson order. You will find everything you need for each day of the school year.





## **Course Introduction**

## **Welcome to Mathematics Kindergarten**



#### Introduction

Welcome to Mathematics Kindergarten, by Lincoln Empowered™. Kindergarten is an impressionable year, full of excitement and learning, laughter, and wonder. Five- and six-year-olds are setting a strong foundation for social, emotional, and academic learning in kindergarten. This year is truly pivotal to their growth and development. Expert educators state that there is no year that produces a wider range of academic readiness than kindergarten. This means that your student may already know some skills set forth in this course, but may struggle with others, which is to be expected. Because of this range in academic readiness, the philosophy of "rehearsal teaching" is in play this year. Rehearsal teaching is the strategy that uses repetition to build content knowledge. Having your student go back and review certain "mastered" content helps them to build a stronger foundation for the future.

Mathematics is all around us. It is an integral part of everyday life. From cooking, cleaning, and home improvement projects, to decorating a room, buying necessities, and saving for retirement, math is involved in everything we do. No matter your personal thoughts or experience with mathematics in the past, it is important to be excited about mathematics with your student. While everyone has areas where they excel and struggle, math learning is now held to the same standard as literacy learning. In the 21st century, illiteracy is detrimental to an individual; the same is true for mathematical illiteracy. It is essential that young students value math the same way that they value reading. It is also essential that young learners begin an ongoing love for mathematical learning and success. What better time to start this mathematical appreciation than in kindergarten?



## **Understanding the Parent and Teacher Guide**



The purpose of this Parent and Teacher Guide is to aid you as you help your student on the path to success.

This guide contains individual lesson pages, written to you, in order to supply you with the tools you will need to guide your student through each of the 180 days of Mathematics K.

You will find clearly marked learning objectives for each day. These objectives were based off of national and state standards. You will also find lists of all the materials you need to facilitate your student's learning. After that, you will find designated sections to support you in the use of the curriculum.

A typical day's lesson will contain the following sections:



## **Activate**

The **Activate** sections provide you with activities that you can use to help uncover your student's prior knowledge and get them excited about their upcoming lesson.



The **Engage** sections steer you to use both online and offline activities and provide you with tips to guide your student through their learning.



The **Demonstrate** sections support the ways your student will show their understanding of the content.

These pages, along with the remainder of the information you will find in this Course Introduction, will empower you to be an effective educational guide.

#### Course at a Glance



Please guide your student to watch the brief welcome video for their course, which can be found just before the Lesson 1 folder. This engaging video is intended to excite your student and kickstart their learning. It will introduce your student to Ellie, who will guide them on a quick journey through some major topics covered in the course. As your student progresses, Ellie may return to provide encouragement or to simply add a personal touch.

#### **End of the Year Expectations for Mathematics Kindergarten**

By the end of the year, and in order to be first grade ready, your student will have mastered the following concepts:

Number identification	The ability to recognize and correctly call out numeral names (e.g., 1, 2, 3)	
Rote counting	The ability to count to 100 by memory, in order, without errors	
Representing and writing numbers	The ability to accurately identify what a numeral represents (e.g., seeing six stars and knowing they represent the number 6)	
Comparing numbers and quantities	The ability to name more than and less than	
Comparing measurements	The ability to decipher longer/shorter, heavier/lighter, more than/less than	

Problem solving	The ability to solve simple addition and subtraction word problems	
Addition and subtraction	The ability to solve simple addition and subtraction equations	
Breaking down numbers	The ability to break down a number into all of its components (e.g., 5 is the same as $0+5$ , $1+4$ , $2+3$ , $3+2$ , $4+1$ , and $5+0$ )	
Basic geometry	The ability to identify and names the attributes of basic shapes	

**NOTE:** Please know that if your student has already mastered any of this content in preschool, it is not necessary to spend a significant amount of time on the previously mastered content in this course. It is, however, important to review the content so that the learning is not lost.

#### **Daily Practice**

The problems and activities in this course are designed to get students counting, developing number sense, writing numbers, recognizing patterns, and solving simple problems. To help solidify these ideas, students need the opportunity to practice math daily. Studies have shown that students who practice math daily have higher retention rates of key skills than those who practice less frequently.

#### **Materials and Kits**

An essential piece of learning mathematics is using math manipulatives. The Lincoln Empowered™ materials kit provides many of the tools your student will need in order to succeed in math learning. Beyond the items in the kit, you may be asked to utilize common household objects such as pennies, pieces of cereal, buttons, etc.

It is a good idea to have graph paper on hand. (Look for the largest squares available, which are easiest for little hands.) You will find it helpful for many problem types, such as drawing a number line and writing out addition and subtraction problems. Students will benefit from completing their work in pencil, as mistakes will inevitably arise, making it necessary to erase and rewrite. Your student should have pencil and paper or a notebook available for every lesson, so they will not be listed separately as required materials in the lesson content or this guide.

#### **Course Assessments**

Assessments in Mathematics K vary in format. Some assessments require students to draw or write their work on a piece of paper or on an activity page to upload for grading. Some assessments require you to note how your student performed on a certain skill. For instance, if your student is asked to count from 1 to 20, you will be asked to provide a statement on your student's performance.

#### The Standards for Mathematical Practices

Along with the mathematical content that your student will learn, it is good for them to think globally about math. These practices span all math content knowledge. As your student progresses through this course, look for opportunities to support the development of these characteristics of good problem solvers:

- Reason abstractly and quantitatively
- Construct viable arguments and critiques
- Make sense of problems and persevere
- Attend to precision

- Model with mathematics
- Look for and make use of structure
- Use appropriate tools strategically
- Look for and express regularity in repeated reasoning

#### **Full Day or Half Day?**

Whether your student works through the kindergarten curriculum on a half day or full day schedule, consider the following points:

- Alternate activities that involve sitting quietly with activities that are more active. Get your student up and moving in between periods of concentrated sitting.
- Young students are more focused, better able to concentrate, and retain what they learn at the beginning of the day.
- Make sure to give your student time and a quiet place to practice math with your support every day.

#### **Understanding How People Learn**



#### **Helping Your Student**

You play an important role in your student's learning, and being able to effectively support the learning process is key. This section will provide you with additional helpful hints, beyond the individual lesson pages, to bring learning to life inside and outside the classroom.

**Did you know?** The brain recognizes the five senses in five different areas. It is best for all learners to tap into as many of these areas as they can, simultaneously. This approach is called a multisensory experience for students.



**Understanding Attention Span:** A good rule of thumb in understanding your student's attention span is to consider their age. Students are generally able to actively concentrate for one minute per age year. Therefore, a kindergartner will only be able to focus on one thing, without a cognitive shift, for about 5 to 6 minutes. At that point, change the way you present an activity to keep your student engaged. For example, a simple change from reading to acting out a task will help your student to concentrate. You can also watch a video and pause it for a discussion. Alternating modes of learning will help your child stay engaged in the content.

#### **Setting a Reason for Learning**

Besides uncovering what your student already knows or doesn't know, it is important to set a reason for learning. Getting students excited about learning a new concept is half the battle to getting them to understand it. Introducing a topic in a fun, exciting way will cause students to want to learn more. Creating excitement can often be accomplished through relating math to real life situations that your student





finds interesting. For example, many students at this age enjoy video games or watching cartoons. Relate the idea that the people who create their favorite games and shows rely on math to do their jobs. You can take this discussion a step further by finding an online video to show your student how math is used in these careers. Playing games is also a great way to get your student excited about math. Along with uncovering your student's prior knowledge, these tools create curious learners who want to explore concepts even further.

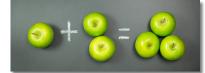
#### **Balancing Factual and Conceptual Learning**

**Factual learning** is basically rote memorization of facts, terms, and content. **Conceptual learning** is a deeper understanding of a concept and can be better achieved through multisensory learning. To move from learning to true understanding, students need a balance of both types of learning, as each is of equal importance.

To help your student build **factual knowledge** in Mathematics K, consider the following points:

- Use number cards and flash cards to practice number sense.
- Consider learning both inside and outside the classroom. For instance, encourage math-related games. Counting out dinner items, counting toys while cleaning up, timing how fast your student can run around the house, or playing the card game "War" are all fun ways to practice math.
- Point out math everywhere you go. From the grocery store to driving down the road, show your student that math is all around them.

To support **conceptual learning**, think about learning in three stages. Consider concrete examples first, followed by pictorial representation, and finally abstract representation. These concrete examples should always come before you ask your student to simply read about or memorize a fact or concept.



- 1. **The Concrete Stage:** First, use objects to "**act out**" math problems, bringing them to life for your student. Have your student explore the concept using concrete objects, such as pasta, pennies, balls, or other three-dimensional manipulatives (for example, those provided in the Lincoln Empowered materials kit). By manipulating objects, students can more easily transfer learning to paper and pencil.
- 2. **The Representational Stage:** Next, **draw** a picture to show what is happening in the math problem. Play Its or Watch Its often offer visual representations of problems, so it is great to allow your student to engage with these items before completing a problem with pencil and paper.
- 3. **The Abstract Stage:** Finally, **use math symbols and numbers** to solve the problem. Help your student make connections between the concrete, representational, and abstract stages of solving a problem.



#### **Assess Prior Knowledge**

It is always best to assess students' prior knowledge before they are introduced to a new topic. This simply means finding out what students already know (or think they know) about the topic. By knowing what your student knows, you are able to quickly review mastered content, uncover misunderstandings, and learn where you need to slow down and provide better support. Throughout the lesson pages of this guide, you will find a number of ways to activate your student's prior knowledge. Besides the specific teaching strategies provided within the lessons, consider these tried and true staples of any educator's classroom.

- Ask a focus question: Focus questions are written in a way that focuses the student's attention solely on the small task ahead and simply asks what they know.
- 2. **KWL Charts:** Work with your student to complete the chart to the right. K list what the student knows; W list what the student wants to know; L list what the student has learned about a given topic.
- 3. 3-2-1: Ask your student to share three things they know about the topic, two things they would like to know, and one question related to the topic

<b>Know</b> what I <i>Know</i>	<b>Wonder</b> what I <i>Want</i> to know	<b>Learn</b> what I <i>Learned</i>

#### **Develop Metacognition**

**Metacognition** is a complex word for something that is part of our daily lives. Simply explained, "meta" means after or beyond, and "cognition" means the process of acquiring knowledge. Therefore, metacognition is something we do after we gain knowledge. The process of metacognition is about self-monitoring, self-evaluating, and self-regulating all types of thought.

When students gain knowledge, it is up to teachers and parents to help them build on their knowledge. Helping your student to develop metacognitive skills is essential.

To help build metacognition, ask your student these questions:

- What are you thinking?
- What do you wonder?
- What did you notice?
- What questions do you have?
- What does this remind you of?
- What are you trying to figure out?
- What are you picturing in your head?
- How are you feeling?
- What do you find interesting?
- What other concept does this connect to?



The goal is to eventually move away from asking your student these questions to your student stating them without being prompted. Eventually, your student will say: "I'm thinking, I notice, I wonder..."

#### The Art of Questioning

To inquire about something is to ask questions about it, to examine or investigate it, or to probe and explore it. A good rule of thumb when guiding your student's learning is to tell less and ask more. While you don't want a student to hit their frustration point, grappling with content actually helps a student to more effectively master that content. To aid them in their learning, consider asking guided questions. This type of questioning can support your student in problem solving and lead them to becoming more independent problem solvers. A student will retain information longer if they discover the concepts themselves instead of being told. Here are some questions to get your student talking and thinking about math!

- How can you represent the number \_\_\_\_ with \_\_\_\_?
- Can you show me?
- Is there another way we could \_\_\_\_?
- What repeats over and over? Do you see a pattern?
- Does that always work?
- · Does this make sense?
- What would happen if?
- What does \_\_\_\_ mean?



## **Empowered™ Courses: What You Need to Know**



Lincoln Empowered™ is a unique kind of curriculum. Courses are composed of learning activities called learning objects. A number of learning objects are presented together as lessons. Learning objects are individual pages and activities that provide students with the content and practice they need to master specific learning objectives, or goals, for a course. Students are often asked to demonstrate mastery of learning objectives by completing assessments.

#### **Engagement**

Students are engaged through various activities, videos, and simulations. Students may be asked to complete a task on paper, or they may engage with a variety of online activities. TextPoppers, for example, are found within the content as blue, bold text. Students can hover over these words with a mouse or click on them to see definitions of key terms and phrases.

#### **Learning Objects**

Ten different types of learning objects exist within Lincoln Empowered courses:



**Read Its** are the primary learning tools within a course. They contain all of the instructional information students need to demonstrate mastery of the granular learning objectives.



**Practice Its** are interactive activities that can be accessed online or offline. They provide the opportunity for students to check their understanding of the learning objectives.



**Watch Its** are learning tools that utilize videos to enhance the learning experience and bring abstract concepts to life for students.



Play Its are content-focused, interactive games that support learning.



**Show Its** are activities that provide the opportunity to show mastery of specific learning objectives.



**Answer Keys** are available to the instructors for all Show Its and Apply Its. They provide correct answers and detailed feedback that can be shared with students.



**Assess Its** are graded activities that allow students to demonstrate mastery of learning objectives and standards.



**Reinforce Its** are supplemental activities to assist students who may be struggling. They also offer a great review before taking assessments.



**Extend Its** provide additional content to extend student knowledge.



**Apply Its** are non-graded assessments that cover content from multiple lessons. Apply Its can be cumulative projects that allow students to demonstrate mastery of several learning objectives. Teachers can elect to make these gradable.

#### **Course Structure**

Each Lincoln Empowered™ course is structured in a similar manner. When you and your student enter a course, you will find a number of topic folders. These topics reflect the key concepts that your student will learn in a specific grade and subject. Each topic folder contains a number of lessons.

Each lesson (e.g., Lesson 1, Lesson 2) represents one day of learning. Lesson folders contain the content, or the learning objects. A set of learning objects is presented to help a student master the content.

The Lincoln Empowered approach to instruction allows students multiple opportunities to learn and master objectives, which leads to mastery of the standards. It is not necessary for a student to complete every learning object. They were created to appeal to different modalities. You will notice that some content repeats, giving students additional exposure to a concept before an assessment. If your student has mastered the concept, move on to the next objective. Work the curriculum to meet your student's needs. There is flexibility in the "Its" that allows for student choice and greater differentiation, which puts you and your student in control of the learning.

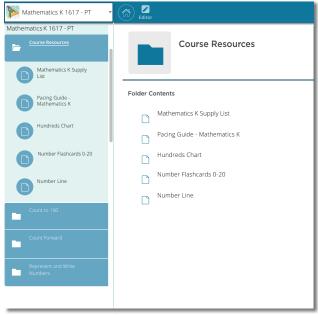
#### **Games and Videos**

While games (Play Its) and videos (Watch Its) may appear after the content within the course, you may want to consider allowing your student to engage with these items first, especially when you need to grab their attention. This type of engagement builds excitement; it encourages the student to share prior knowledge or ask questions; and it helps to build knowledge for students who are lacking experience in a certain concept. Often, you will hear your student say, "They talked about that in the video!" or other statements of excitement.

#### **Course Resources**

The first folder in your course is titled, "Course Resources." It contains a set of useful resources that will help your student begin the course. Start by reviewing the Supply List and Pacing Guide. Then, view some of the materials you will need throughout the course.





#### **Time to Get Started**

You now have all the information you need to have a successful year. So, what are you waiting for? Log in to your course and get started!



**Topic** 

#### Color, Size, and Shape

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

• say circle and point to one in the room

#### **Materials**

- sticky notes
- dry erase board and marker
- paint
- paint brushes

## **Identifying Circles**



## **Activate**

- 1. Ask your student to name some things that are shaped like a circle.
- 2. Then, ask your student what makes that object a circle. After your student responds, discuss that the shape is round and that it is closed.



## **Engage**

- 1. Begin with the **Read It** and read about circles. Finish with the Self Check.
- 2. Next, open the **Circles Watch It** and view the video with your student. Pause the video at 01:04 to review how to draw a circle. Allow your student some time to draw all different size circles on their dry erase board.
- 3. Next, open **Brick's Shapes-Space circles Play It** and **Memory Match-Shapes Play It**, and have your student play the games until they have mastered the content.
- 4. Finally, ask your student if they can think of any other things that are shaped like a circle.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice identifying circles.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student use paint and a paint brush to paint colorful, overlapping circles. Hang the painting where your student can look at it.





#### Color, Size, and Shape

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

say triangle and point to one in the room

#### **Materials**

- sticky notes
- dry erase board and marker
- paint brushes
- construction paper
- glue
- scissors

## **Identifying Triangles**



## Activate

- 1. Ask your student to name some things that are shaped like a triangle.
- 2. Then, ask your student what makes that object a triangle and discuss.



#### Engage

- 1. Begin with the **Read It** and read about triangles. Finish with the Self Check.
- 2. Next, open the **Triangles are Everywhere Watch It** and view the video with your student. Pause the video as necessary to discuss triangles and where you can find them.
- 3. Then, use the dry erase board and marker to practice drawing some triangles.
- 4. Next, open Brick's Construction Zone-Shapes Play It and Brick's Shapes-City Triangles Play It, and have your student play the games until they have mastered the content.
- 5. Finally, ask your student if they can think of any other things that are shaped like a triangle.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice identifying triangles.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student cut triangles out of different colored construction paper, making sure they have three corners and three sides. It may be easier to have your student draw the triangles first and then cut them out. Then, glue them onto another piece of paper to create a triangle collage.





#### Color, Size, and Shape

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

say square and point to one in the room

#### **Materials**

- sticky notes
- dry erase board and marker
- sugar
- cookie sheet

## **Identify Squares**



## **Activate**

- 1. Ask your student to name some things that are shaped like a square.
- 2. Then, ask your student what makes that object a square and discuss.



#### Engage

- 1. Begin with the **Read It** and read about squares. Finish with the Self Check.
- 2. Next, open the **Squares Watch It** and view the video with your student. Pause the video as necessary to discuss squares and where you can find them.
- 3. Use the dry erase board and marker to practice drawing some squares.
- 4. Next, open Brick's Construction Zone-Shapes Play It, Brick's Shapes-City Squares Play It, and Brick's Shapes-Museum Squares - Play It, and have your student play the games to find all of the shapes.
- 5. Finally, ask your student if they can think of any other things that are shaped like a square.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice identifying squares.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student use their pointer finger to practice tracing the outline of the squares on a cookie sheet filled with sugar.



**Topic** 

## Color, Size, and Shape

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

say rectangle and point to one in the room

#### **Materials**

- sticky notes
- dry erase board and marker

## **Identify Rectangles**



#### Activate

- 1. Ask your student to name some things that are shaped like a rectangle.
- 2. Then, ask your student what makes that object a rectangle and discuss.



## Engage

- 1. Begin with the **Read It** and read about rectangles. Finish with the Self Check.
- 2. Next, open the Find Squares and Rectangles Watch It and view the video with your student. Pause the video as necessary to discuss the content.
- 3. Use the dry erase board to practice drawing some rectangles.
- 4. Next, open Brick's Shapes-Park Rectangles Play It and Memory Match-Shapes Play It and have your student play the games until they have mastered the content.
- 5. Finally, ask your student if they can think of any other things that are shaped like a rectangle.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice identifying rectangles.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, cut some sticky notes into squares and rectangles and post them randomly in front of your student. Have your student put the notes into two groups, squares and rectangles.



**Topic** 

#### Color, Size, and Shape

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

say hexagon and point to one in the room

#### **Materials**

- six cotton swabs
- construction paper
- scissors
- digital camera or smartphone

## **Identifying Hexagons**



#### Activate

- 1. Ask your student to use all six cotton swabs to make one shape.
- 2. Then, ask your student how many sides and how many corners this shape has.



## Engage

- 1. Begin with the **Read It** and read about describing hexagons. Finish with the Self Check.
- 2. Then, open the Memory Match-Shapes Play It, and have your student play the game until they have mastered the content.
- 3. Finally, ask your student if they can think of any other things that are shaped like a hexagon (honeycomb, the white part of a soccer ball, a bolt). Emphasize that there are six sides, six corners, and that the shape is closed.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice identifying hexagons.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student make a sun or a star using a hexagon for the middle and squares, triangles, and rectangles as the rays or points. It may be easier for your student to draw the shapes first, then cut them out and paste them on construction paper.





#### Color, Size, and Shape

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

sort objects by color

#### **Materials**

- "Sort by Color" activity page
- scissors
- glue stick
- Twister® game
- paint
- paint brushes

## **Sort by Color**



## Activa<u>te</u>

- 1. Look around your learning environment and help your student find six objects of unique size and
- 2. Help your student line up the objects from smallest to largest, and discuss the characteristics of the objects such as color and size.
- 3. Ask your student how the objects are the same and how they are different to engage them in a conversation about comparing and contrasting the objects.



- 1. Begin with the **Read It** and discuss how to sort objects by their color. Finish with the Self Check.
- 2. Next view the All Sorts of Colors Watch It together. Pause the video as needed to discuss the content for better understanding.
- 3. Continue with the Capture the Inks-Colors Play It and the Memory Match-Colors Play It. Have your student play the games until they master the content.



- 1. Move on to the **Show It** and follow the directions to complete the activity.
- 2. Finally, use the **Show It AK** to work with your student to check their answers.
- 3. For extra practice, use the game Twister® to practice using colors as directed by the spinner, or paint a picture with different colors.



**Topic** 

#### Color, Size, and Shape

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

sort objects by size

#### **Materials**

- colored craft pom-poms (2 different sizes - 10 of each)
- "Sort by Size" activity page
- scissors
- glue stick
- coins

## **Sort by Size**



## **Activate**

- 1. Show your student the colored pom-poms.
- 2. Ask your student to identify what is the same and what is different about the pom-poms?
- 3. Guide the conversation to the fact that the pom-poms are two different sizes.



- 1. Begin with the **Read It** and discuss how to sort objects by their size while emphasizing the definition of *attribute*.
- 2. Next, view the **Out of Sorts Watch It** with your student. Pause the video as needed to discuss the content for better understanding.
- 3. Continue with the **Sensei's Sequence-Blocks Play It** to practice sorting blocks by size. Have your student play the game again to reinforce the content.



- 1. Move on to the **Show It** and follow the directions to complete the activity.
- 2. Finally, use the **Show It AK** to work with your student to check their answers.
- 3. For extra practice, have your student sort a set of coins and the pom-poms according to the size.



**Topic** 

#### Color, Size, and Shape

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

• use the terms *above*, *below*, and *beside* to describe relative positions of an object in relation to another object

#### **Materials**

sticky notes

## **Positioning Objects**



## **Activate**

- 1. Have your student stand up against a wall. Place one sticky note on the floor in front of them, one on the wall next to them, and one on the wall above them.
- 2. Help your student locate all of the sticky notes.



- 1. Begin with the **Read It** and read about position words. Finish with the Self Check.
- 2. Open **Harvest's Market-Part One Play It** and have your student play the game until they have mastered the content.
- 3. Use this opportunity to instruct your student to draw a picture of themselves. Then ask your student to draw a square above them, a triangle below them, and a circle beside them.



- 1. Move on to the **Show It** and follow the directions to complete the activity.
- 2. Use the **Show It AK** to work with your student to check their answers.
- 3. While you are out, have your student practice with the words *above*, *below*, and *beside*. For example, while you are driving, ask your student, "What is below of the car? What is beside the car? What is above the car?"



#### Color, Size, and Shape

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 use the terms in front of, next to, and behind to describe relative positions of an object in relation to another object

#### **Materials**

- 3 stuffed animals
- sticky notes

## **Positioning Objects 2**



## **Activate**

- 1. Ask your student to sit on the floor.
- 2. Place one stuffed animal *in front* of your student, one *behind* your student, and one *next to* your student.
- 3. Point to each stuffed animal and ask your student where that stuffed animal is, in the line, in relationship to your student.
- 4. Guide your student to the idea that one stuffed animal is *in front* of them, one is *behind* them, and the other is *next to* them.



#### **Engage**

- 1. Begin with the **Read It** and read about more positioning words. Finish with the Self Check.
- 2. Open the **Line Them Up Watch It** and view the video with your student. Pause the video as necessary to discuss the content.
- 3. Open **Harvest's Market-Part Three Play It** and have your student play the game until they have mastered the content. Remind your student that *between* means in the middle of two things.
- 4. Have your student stand against the wall with the sticky notes again. Discuss the learned positioning words regarding the placed sticky notes.
- 5. Have fun using the words during everyday events.



- 1. Open the **Assess It** and have your student complete the activity. If your student cannot write the words, write the answers for them when they say the answer aloud.
- When your student is finished, submit the document by scanning it or taking a photo of it and
  uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper
  clip icon in the upper-left corner of the Assess It.



**Topic** 

#### **Numbers Through 10**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- count to 10
- count aloud from memory in order through 10, starting at different numbers

#### **Materials**

ball

## **Counting Sounds**



## **Activate**

- 1. Ask your student how high they can count.
- 2. Have your student count while making sure they do not skip or repeat numbers.



#### <u>Engage</u>

- 1. Begin with the **Read It** and read the steps to your student.
- 2. As an alternative, have your student practice counting to 10 by hopping each time they say a number.
- 3. You can also throw a ball back and forth while counting out loud. Consider miscounting on your turn to see if your student can catch your error.



## **Demonstrate**

- 1. Next, move on to the **Show It** and have your student complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.

#### • • •

## **Count to 10 by Ones**



## **Activate**

- 1. Have your student find items around the room with numbers on them.
- 2. You can turn this activity into a game with your student. Set a 2-minute timer and see who finds more objects.



- 1. Continue with the **Read It** and read about counting to ten from different starting points. Finish with the Self Check.
- 2. Open the **Sensei's Sequence-Numbers Part Two Play It** and have your student follow the directions to play the game.
- 3. Ask your student to play the game again. Have them try placing the highest numbered card first and complete the sequence from highest to lowest numbers.



- 1. Now move on to the **Show It** and have your student complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Try quizzing your student by counting aloud from 1 to 10 and skipping a number. Have your student identify the number that you skipped.



**Topic** 

#### **Numbers Through 10**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

recognize that zero represents none

#### **Materials**

- dry erase board and marker
- half an empty egg carton
- permanent marker
- counters

## **Recognizing Zero**



## **Activate**

- 1. Ask your student to hold up five fingers. Now cover them up and ask, "How many fingers do you see?"
- 2. Show your student how to trace the 0 with their index finger. Have them trace the number 0 with their index finger on a sheet of paper.



## **Engage**

- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Next, view the **Much to Do About Nothing Watch It** together. Pause the video as needed to discuss the content.
- 3. Use this opportunity to have your student use the dry erase board to write a zero and trace it with their finger. Discuss that this zero is an oval, a shape similar to a circle.



- 1. Move on to the **Show It** and have your student complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. To continue practicing, write the numbers 0 through 5 in each section of half of an egg carton. One number should be placed in each section. Have your student fill each section with the appropriate amount of counters as displayed on the egg carton.



**Topic** 

#### **Numbers Through 10**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 relate numbers to amounts of objects by counting groups of objects to 10

#### **Materials**

"Tens Treats" activity page

## **Counting Objects to 10**



## **Activate**

- 1. Have your student do 10 jumping jacks, counting aloud for each jump. Count with your student as they jump.
- 2. After they are done with the jumping jacks, ask your student if there is another exercise set that they would like to use to practice counting to 10.



## **Engage**

- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Next, view the **Counting with Small Numbers Watch It** together. Pause the video as needed to discuss the content.
- 3. Then, continue to the **Memory Match-Number Items Play It**. Feel free to play the game multiple times to practice the material.



- 1. Move on to the **Show It** and follow the directions to complete the activity.
- 2. Finally, use the **Show It AK** to work with your student to check their answers.
- 3. Have your student try doing 10 sit-ups while counting aloud for each one completed.



**Topic** 

#### **Numbers Through 10**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

count sets of objects up to 10

#### **Materials**

group of similar objects

## **Object Sets to Ten**



#### **Activate**

- 1. Have your student find groups of similar objects in your home such as pots, utensils, blocks, pillows, etc.
- 2. Ask your student to count the number of objects in each group that they find.



- 1. Begin with the **Read It** and read about counting sets of similar objects up to 10.
- 2. Have your student point to each object as they count aloud.
- 3. Next, open the **Sets of Animals Watch It** and view the video.
- 4. Feel free to pause the video to have your student practice counting the sets aloud as they are shown, and engage with your student in a related discussion.
- 5. Open the Feed Harvest-Numbers Part One Play It and follow the directions to play the game.
- 6. Have your student play the game again until they feel comfortable counting the sets.



- 1. Now move on to the **Show It** and follow the directions to complete the activity.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. To continue practicing, have your student count sets of glasses, plates, and bowls.



**Topic** 

#### **Numbers Through 10**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

write one-digit numbers from 0 to 9

#### **Materials**

- number cards
- counters

## Writing 0 to 9



## **Activate**

- 1. Get out the number cards to look at each number from 0 to 9. Help your student recognize each digit.
- 2. Have your student trace one number with their finger on each of the cards.



## <u>Engage</u>

- 1. Begin with the **Read It** and have your student follow the directions to write the numbers 0 to 9. Finish with the Self Check.
- 2. Have your student place the appropriate amount of counters on each number card to represent the number shown.



- 1. Now move on to the **Show It** and have your student complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. To continue practicing, have your student write the numbers a few times each on lined paper.



**Topic** 

#### **Numbers Through 10**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

draw a picture to represent amounts up to 10

#### **Materials**

- "Counting Cookies" activity page
- crayons

## **Drawing Quantities to 10**



## **Activate**

- 1. Give your student a piece of paper.
- 2. Have your student draw a picture of a fish, a circle, and a star. Tell them that they get to practice their art while doing math today.
- 3. Have your student count aloud as they touch each picture.



#### Engage

- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Finish the **Read It** by completing the Self Check. You can also have your student practice with their own pictures.



- 1. Move on to the **Show It** and follow the directions.
- 2. Finally, use the **Show It AK** to work with your student to check their answers.
- 3. To continue practicing, have your student draw other groups of numbers. Challenge them by asking them to draw a certain number of flowers in their artwork. Gently mixing in numbers during their creative time is a great reinforcement activity.



**Topic** 

#### **Numbers Through 10**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

represent the numbers 1 through 10 with objects

#### **Materials**

- counters
- number cards

## **Represent 1-10 with Counters**



## **Activate**

- 1. Place 6 counters on the table.
- 2. Ask your student to tell you how many counters there are and to write the number on a piece of paper.



#### <u>Engage</u>

- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Have your student try making their own sets of numbers with the counters.
- 3. Now, open the **Represent Numerals Watch It** and make note of the username and password provided on the Discovery Education image. Click the link for the video and enter the provided username and password to watch.
- 4. Pause the video and discuss the content with your student as needed.



- 1. Move on to the **Show It** and have your student complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Continue practicing by counting other objects while you are out with your student. For example, have them count out 10 apples or other produce at the grocery store.



**Topic** 

#### **Numbers Through 10**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

count aloud from 0 to 10 using a number line

#### **Materials**

number line 0 –10

#### **Number Line - Ten**



#### **Activate**

- 1. Explain to your student that they are going to learn to use a number line to help them count and keep numbers in order.
- 2. Say the numbers "4, 6, 5, 7, 8" to your student. Ask them if a number is out of place and have them say the numbers in the correct order. Explain that a number line will help them see this order correctly.



- 1. Begin with the **Read It** and follow the directions for counting using a number line.
- 2. Now, open the **Number Line Watch It** and make note of the username and password provided on the Discovery Education image. Click the link for the video and enter the provided username and password to watch.
- 3. To practice, ask your student to touch each number on the number line as they count each number aloud.



- 1. Next, move on to the **Show It** and follow the directions to complete the activity.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, pull out the number cards (1 through 10) and shuffle them. Ask your student to draw a card and place it on the correct spot on the number line. Continue until all ten cards have been used. Keep playing as long as your student has interest.



**Topic** 

#### **Numbers Through 10**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 use objects to represent numbers on a number line from 0 to 10

#### **Materials**

- number line
- toy car
- counters
- "Represent 0 –10 on a Number Line" activity page

## **Represent 0-10 on a Number Line**



## **Activate**

- 1. Place the number line and car in front of your student.
- 2. Help your student drive the toy car along the number line from 0 to 10, saying each number aloud as they pass it.



- 1. Begin with the **Read It** and follow the directions to represent numbers on a number line.
- 2. As a suggestion for hands-on practice, use counters on the printed number line to help your student see the representation. Finish the section with the Self Check.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice representing 0 to 10 on a number line.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, you can have your student use pieces of cereal to represent the numbers 0 to 10 on the printed number line.



**Topic** 

#### **Numbers Through 10**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

count from 1 to 10 by memory

#### **Materials**

10 pieces of candy

## **Rote Counting to 10**



#### **Activate**

- 1. Ask your student to name their favorite type of candy.
- 2. Ask why it is their favorite. Is it the shape, color, or flavor?



## <u>Engage</u>

- 1. Begin with the **Read It** and have your student follow along as you read the content aloud.
- 2. As your student works through the problems, consider having them point to each picture as they say the number.
- 3. Remember to have your student check their learning using the Self Check.
- 4. Next, view the **A Piggy Bank for 10 Watch It** together. Pause the video and ask your student what they are thinking. This will help them connect to the content.
- 5. You can also have your student count out the 10 pieces of candy from the Activate section as a connection to the video.
- 6. Continue the lesson by having your student open **Sensei's Sequence-Numbers Part One Play It** and play the game. Feel free to play multiple times.



#### <u>Demonstrate</u>

- 1. Now that your student has practiced counting, move on to the **Show It** and follow the directions.
- 2. Listen to your student count and check that they count correctly from 1 to 10.
- 3. For extra practice, the next time you take a walk with your student, have them look for specific objects and count them (up to ten). For example, ask them to find ten cars and count them out loud. After they find the ten cars, ask them to look for a different object and count it up to ten.



**Topic** 

#### **Numbers Through 10**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

count backward from 10 to 1

#### **Materials**

10 objects

## **Counting Backward from 10**



## **Activate**

- 1. Ask your student if they have ever counted backward.
- 2. Have your student think about a time when they could count backward. Examples may include counting down from 10 on New Year's Eve or at a race, saying 3...2...1...go!



- 1. Begin with the **Read It** and follow the directions for counting backward.
- 2. You can have your student practice by writing the numbers in reverse order or by taking 10 objects and counting backward as they touch each object.
- 3. Remember to have your student check their learning using the Self Check.



- 1. Now that your student has practiced, move on the **Show It** and follow the directions.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have a race of any kind with your student. Before the race begins, have your student count down from 10 to start the race.



**Topic** 

## **Compare Multiple Numbers**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

count a number of objects

#### **Materials**

 "Counting Animals" activity page

## **Count Objects**



## **Activate**

- 1. Have your student count a group pencils. The group should contain any number of pencils up to 10.
- 2. Then have your student count another group of pencils that totals no more than 10. Discuss how these two numbers are similar or different from each other.



- 1. Begin with the **Read It** and read about counting objects. Finish with the Self Check.
- 2. Open the **What is the Number? Watch It** and view the video with your student. Pause it as needed to discuss the content.



- 1. Move on to the **Show It** and follow the directions to complete the activity.
- 2. Use the **Show It AK** to work with your student to check their answers.
- 3. As a suggestion for more practice, have your student count their toys as they are cleaning up. Have them count up to ten and then start again if needed.





#### **Compare Multiple Numbers**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use the terms more than, less than, and same amount to compare groups of objects

#### **Materials**

- "Comparing Shapes" activity
- counters two different colors

## **Count and Compare**



## **Activate**

- 1. Place five counters of one color and five counters of another color in front of your student, making sure the two groups of colors are separated.
- 2. Ask your student what they notice about the two groups. Guide them to the conclusion that both groups have the same amount, or five counters.
- 3. Repeat this process with one group having more counters than the other.
- 4. Again, ask your student what they notice about the two groups, and guide them to the conclusion that one group has *more than* the other or one group has *less than* the other.



#### Engage

- 1. Begin with the **Read It** and read about using terms to compare two numbers. Finish with the Self
- 2. As a suggestion, your student can continue to practice using terms to compare two numbers using sets of objects around them.



- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, submit the numbers they missed by scanning the document or taking a photo of it and uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the Assess It.



#### **Topic**

## **Compare Multiple Numbers**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

identify a number from 0-10 as being greater than another

#### **Materials**

- two playing dice
- paper clips

## **Greater by Modeling**



## Activate

- 1. Give your student a playing die and keep one for yourself. Tell your student that you will both roll the dice at the same time. Keep rolling until your student has the larger number. Discuss that your student's number is greater than yours.
- 2. Play again, but this time roll the dice until your student rolls a number that is less than your number. Discuss that their number is less than yours.



## Engage

- 1. Begin with the **Read It** and help your student practice determining *greater than* using paper clips. Finish with the Self Check.
- 2. Now go to the **Comparing Numbers Watch It** and make note of the username and password provided on the Discovery Education image. Click the link for the video and enter the provided username and password to watch.
- 3. View the video with your student using the full-screen option and pause as necessary to discuss the content.



- 1. Move on to the **Show It** and follow the directions to practice identifying the group with the greater amount of paper clips.
- 2. Use the **Show It AK** to work with your student to check their answers.
- 3. For more practice, try teaching your student other card or dice games where the winner is based on greater numbers versus lesser numbers.



## **Compare Multiple Numbers**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

identify a number from 0-10 as being less than another

#### **Materials**

- two playing dice
- paper clips

## **Less by Modeling**



## **Activate**

- 1. Give your student a playing die and keep one for yourself. Tell your student that you will both roll the dice at the same time. Keep rolling until your student has the lesser number. Discuss that your student's number is less than yours.
- 2. Play again, but this time roll the dice until your student rolls a number that is larger than your number. Discuss that their number is greater than yours.



## Engage

- 1. Begin with the **Read It** and help your student practice determining *less than* using paper clips.
- 2. For extra practice, ask your student to also identify the *greater than* group. Finish with the Self Check.



- 1. Move on to the **Show It** and follow the directions to practice identifying the group with the lesser amount of paper clips.
- 2. Use the **Show It AK** to work with your student to check their answers.
- 3. To continue practicing, have your student make groups of toy cars, blocks, or dolls and compare the greater than group and the less than group.





#### **Compare Multiple Numbers**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- identify greater than by comparing pairs of numbers from 1 to 10 by drawing
- identify less than by comparing pairs of numbers from 1 to 10 by drawing

#### **Materials**

dry erase board and marker

## **Greater by Drawing**



## Activate

- 1. Draw a picture on the dry erase board with two sets of objects: 4 circles in the first set and 8 squares in second set.
- 2. Ask your student to identify the set that has more objects and the set that has less objects.
- 3. Ask them how they know.



#### Engage

- 1. Begin with the **Read It** and help your student practice determining *greater than* by drawing a picture. If your student struggles with drawing, it is okay to lay out counters to represent the numbers in the beginning. Then, slowly move to drawings.
- 2. Have your student try drawing their own picture on the dry erase board to represent *greater than*. Finish the **Read It** by completing the Self Check.



#### emonstrate

- 1. Move on to the **Show It** and follow the directions to practice identifying the group with the greater amount by drawing a picture.
- 2. Use the **Show It AK** to work with your student to check their answers.



## **Less by Drawing**



- 1. Continue with the **Read It** and help your student practice determining *less than* by drawing a picture.
- 2. Have your student try drawing their own picture on the dry erase board to represent *less than*. Finish the **Read It** by completing the Self Check.



- 1. Move on to the **Show It** and follow the directions to practice identifying the group with the lesser amount by drawing a picture.
- 2. Finally, use the **Show It AK** to work with your student to check their answers.
- 3. To continue practicing, have your student roll a playing die. Next, ask them to draw the rolled number of circles on their paper. Have them do this twice, representing the numbers rolled by drawing groups of circles. Compare the numbers with the words *greater than* and *less than*.



**Topic** 

#### **Compare Multiple Numbers**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 identify greater than by comparing pairs of numbers from 1 to 10 using a number line

#### **Materials**

- number line 0-10
- counters

#### **Greater on a Number Line**



## **Activate**

- 1. Help your student find or draw an example of a number line.
- 2. Have your student count the numbers on the number line to 10 while touching each number as they count.



- 1. Number lines are one of the most used materials in math. A number line helps students compare and order numbers. It is important to have your student understand how number lines work.
- 2. Begin with the **Read It** and help your student practice determining greater than by using a number line. Finish the **Read It** by completing the Self Check.
- 3. Next, view the **Comparing Numbers on Number Line Watch It** together. Pause the video as necessary to discuss the content.



- 1. Move on to the **Show It** and follow the directions to practice identifying the group with the greater amount by using a number line. Use counters to mark the numbers being compared on the number line.
- 2. Use the **Show It AK** to work with your student to check their answers.
- 3. Finally, use the **Extend It** to learn more about *greater than* on a number line.





#### **Compare Multiple Numbers**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

identify less than by comparing pairs of numbers from 1 to 10 using a number line

#### **Materials**

- number line 0-10
- counters

#### Less on a Number Line



## **Activate**

- 1. Ask your student to find a group of the same object. This could be crackers, grapes, or any type of
- 2. Ask your student if they can count how many objects are in the group.



- 1. Begin with the **Read It** and help your student practice determining *less than* by using a number line.
- 2. Have your student use counters to mark the numbers being compared on the number line. Finish the **Read It** by completing the Self Check.



- 1. Move on to the **Show It** and follow the directions to practice identifying the group with the lesser amount by using a number line. Use counters to mark the numbers being compared on the number line.
- 2. Use the **Show It AK** to work with your student to check their answers.
- 3. For extra practice, ask your student to count various groups of toys and determine which group has the greater amount and which group has the lesser amount. You could also have your student count and track the number of cars that pass their window versus the number of trucks that pass. Discuss which group has the greater and lesser amount.



**Topic** 

#### **Compare Multiple Numbers**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 count groups of objects to order them from least to greatest and greatest to least

#### **Materials**

- "Ordering Food" activity page
- glue stick
- scissors
- silverware

#### **Order Sets**



## **Activate**

- 1. Have your student count out a groups of forks, a group of spoons, and a group of butter knives. Each group should contain a different number of objects.
- 2. Leave them out so they can be used later in the lesson.



- 1. Begin with the **Read It** and read about counting objects to put them in order from least to greatest and greatest to least. Finish with the Self Check.
- 2. Have your student arrange the groups of forks, spoons, and knives from least to greatest and then greatest to least.



- 1. Move on to the **Show It** and follow the directions to complete the activity.
- 2. Use the **Show It AK** to work with your student to check their answers.
- 3. For extra practice, have your student count out the number of t-shirts they have versus the number of pants or other articles of clothing. Order the groups by least to greatest and then greatest to least.



#### **Compare Multiple Numbers**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

• identify the appropriate method to compare two numbers between 1 and 10

#### **Materials**

- base ten blocks
- number line 0-10

## **Choosing a Method**



#### **Activate**

- 1. Scatter 4 base ten units in one group and 6 base ten units in another group.
- 2. Have your student identify which group is greater than and which group is less than. Take note of their answer.



- 1. Begin with the **Read It** and help your student understand the three different methods of comparing numbers from 1 to 10. Finish the **Read It** by completing the Self Check.
- 2. As a suggestion, consider going back to the base ten units used in the Activate section. Use the units to demonstrate all three methods for determining greater than and less than.
- 3. Next, view the **Greater than and Less than Watch It** together. Pause the video as necessary to discuss the numbers that are greater than and less than. Note that the greater than and less than symbols are not discussed at this age, but this content can extend your student's learning.



- 1. Open the **Assess It** and follow the directions to demonstrate your student's knowledge.
- 2. When your student is finished, submit their work by scanning the document or taking a photo of it and uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

#### **Numbers Through 20**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 relate numbers to amounts of objects by counting groups of objects to 20

#### **Materials**

- sidewalk chalk
- "Bowling Twenty" activity page
- 10 pins
- ball

## **Counting Objects to 20**



#### **Activate**

1. Using the sidewalk chalk, go outside and draw a hopscotch game that has 20 steps. Have your student hop through the game saying each number as they jump.



- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Move on to the **All about Twelve Watch It**. Pause the video as necessary to discuss the content.
- 3. Have your student practice writing the numbers on their own piece of paper.



- 1. Move on to the **Show It** and follow the directions to complete the activity.
- 2. Finally, use the **Show It AK** to work with your student to check their answers.
- 3. To continue practicing, have your student play bowling and count the number of pins they knock over with each roll. If you do not have a play bowling set, you could use empty paper towel rolls, empty toilet paper rolls, or toy towers for pins.



**Topic** 

#### **Numbers Through 20**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

relate names of numbers up to 20

#### **Materials**

number cards

#### Writing 10 to 20



## **Activate**

- 1. Help your student to find an object to represent each number from 10 to 20.
- 2. Have your student trace one number with their finger on each of the objects.



## **Engage**

- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Open the **Order It Watch It** and view the video with your student. Pause as necessary to discuss the content.
- 3. Have your student practice putting the number cards 10 to 20 in order to reinforce the video content. You can provide your student with a practical example of using numbers in order by discuss waiting in line at the grocery store deli.
- 4. Now go to the **Write Numbers to 20 Watch It** and make note of the username and password provided on the Discovery Education image. Click the link for the video and enter the provided username and password to watch. Pause as needed to discuss content.



- 1. Move on to the **Show It** and have your student complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For more practice, have your student write their numbers neatly on lined paper.





#### **Numbers Through 20**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- count an amount of objects up to 20 and write the number
- count a group of objects up to 20

#### **Materials**

- muffin pan
- 20 toothpicks
- "Shining Stars" activity page
- "Ready for School" activity page

## **Writing Groups to 20**



## Activate

- 1. Place the toothpicks in the muffin pan randomly.
- 2. Help your student count out each group of toothpicks, saying the number each time they remove a toothpick.



- 1. Begin with the **Read It** and follow the directions to count objects and write the number.
- 2. Next, move on to the **Memory Match-Number Items Play It** and follow the directions.



#### emonstrate

- 1. Move on to the **Show It** and have your student complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. To continue practicing, have your student count out how many eggs are left in a carton, or ask them to count another food item.



## **Counting Groups to 20**



- 1. Continue with the **Read It** and follow the directions to practice counting to 20.
- 2. Next, open the Counting Pictures Watch It and pause as necessary to discuss the content.

- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, submit their work by scanning the document or taking a photo of it and uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the Assess It.





#### **Numbers Through 20**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- count aloud from 0 to 20 using a number line
- count aloud from 1 to 20 using a hundreds chart

#### **Materials**

- number line 0 20
- ruler
- tape measure
- 20 objects
- printed hundreds chart
- orange crayon

## **Number Line - Twenty**



## **Activate**

- 1. Help your student find objects in the house that resemble a number line such as a ruler or tape
- 2. Have your student point to each number and count on the number line through 20.



## Engage

- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Have your student find 20 small objects to line up on a ruler or tape measure. Then ask your student to practice counting aloud as they touch each object.



## Demonstrate

- 1. Next, move on to the **Show It** and have your student complete the activity.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.

## **Hundreds Chart - Twenty**



## **Activate**

- 1. Have your student color the second row of the hundreds chart orange (numbers 11-20).
- 2. Ask your student if they know how many rows they will look at on the hundreds chart if they count to 20.

#### Engage

- 1. Continue with the **Read It** and follow the directions to complete the activity.
- 2. Have your student look for more patterns on the hundreds chart.
- 3. Ask your student to use the orange row on the hundreds chart to practice counting from 11-20.



- 1. Now, move on to the **Assess It** and follow the directions to demonstrate your student's knowledge.
- 2. Open the **Assess It** and have your student complete the activity. When they are finished, submit the numbers they missed by scanning the document or taking a photo of it and uploading it to the Dropbox. If your student did not miss any numbers, write "All correct" on your paper and submit it via the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

#### **Numbers Through 20**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 use objects to represent numbers on a number line from 0 to 20

#### **Materials**

- number flashcards 0-20
- number line
- counters

## Representing 0-20 on a Number Line



## **Activate**

- 1. Shuffle number flashcards 0-20 and give them to your student.
- 2. Have your student line up the flashcards in numerical order. Whey the are finished, check their work and explain any incorrectly ordered cards.



- 1. Begin with the **Read It** and follow the directions to complete the number line activity.
- 2. You can have your student line up the counters vertically below each number of the number line. This process will allow them to see the increase in counters from left to right.
- 3. Reinforce the directions of left and right.
- 4. Finish with the Self Check.



- 1. Next, move on to the **Show It** and have your student complete the activity with the number line through 20.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, you can have your student use small objects, such as counters along a tape measure, to represent the numbers 0 through 20.



**Topic** 

#### **Numbers Through 20**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 recognize numbers from 0 to 19 by matching them to numbers of objects

#### **Materials**

- 19 pennies
- "Super Smiles" activity page
- scissors
- glue

## **Matching Numbers to Amounts**



## **Activate**

- 1. Help your student stack 19 pennies, one on top of another.
- 2. Ask your student to say the numbers aloud as they place the pennies on the stack. Say the numbers with them.



- 1. Begin with the **Read It** and have your student follow the directions to complete the activity.
- 2. Now, open the **How Many Are There? Watch It** and make note of the username and password provided on the Discovery Education image. Click the link for the video and enter the provided username and password to watch.
- 3. You could pause the video and have your student count the lamps, chairs, and clocks in their learning environment.
- 4. Open the **Memory Match Number Items Play It** and have your student follow the directions to play the game.



- 1. Now move to the **Show It** and have your student complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.





#### **Numbers Through 20**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- represent the numbers 0 through 20 with sounds
- represent the numbers 11 through 20 with objects

#### **Materials**

- ball
- number cards
- counters

## **Represent Numbers with Sounds**



## **Activate**

- 1. Have your student bounce a ball while you count aloud each time the ball bounces and makes a sound.
- 2. Discuss a sound with your student that they have counted in the past. Examples might include a car horn honking or a duck quacking. Be creative!



- 1. Begin with the **Read It** and have your student follow the directions to complete the activity.
- 2. Have your student think of their own sound to try representing any number from 0 through 20 that they choose.



## **Demonstrate**

- 1. Move on to the **Show It** and have your student complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.

## **Represent 11-20 with Counters**



#### Engage

- 1. Continue with the **Read It** and have your student follow the directions to complete the activity by counting the buttons.
- 2. Have your student continue practicing using the counters.



- 1. Move on to the **Show It** and have your student complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student choose their own way to represent 20. They could choose to use a sound, an exercise, a group of objects, etc.





#### **Numbers Through 20**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

represent the numbers 0 through 20 with objects

#### **Materials**

- playing die
- 20 counters
  - number cards

## **Represent 0-20 with Counters**



## **Activate**

- 1. Help your student touch each dot on the die as they count each side of the die.
- 2. Help your student to practice memorizing what each side of the die represents by taking turns rolling the die and calling out the number represented.



- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Move on to the **Reinforce It** and have your student complete the activity.



- 1. Open the **Assess It** and follow the directions to demonstrate your student's knowledge.
- 2. When your student is finished, submit their work by scanning the document or taking a photo of it and uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the Assess It.



#### **Numbers Through 20**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

relate numbers to amounts up to 20 by using objects to represent the amounts

#### **Materials**

- dry erase board and marker
- magnetic tiles
- counters

## **Modeling Quantities to 20**



## **Activate**

- 1. Have your student draw 8 houses on the dry erase board.
- 2. Help your student place a magnetic tile on each house and count aloud as each tile is placed.



- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Now open the **Twenty Passengers Watch It**. Make note of the username and password provided on the Discovery Education image. Click the link for the video and enter the provided username and password to watch.



- 1. Move on to the **Show It** and follow the directions.
- 2. Finally, use the **Show It AK** to work with your student to check their answers.
- 3. To continue practicing, have your student model different numbers throughout their day. They can count out their snacks or toys, or they can even line up items outside to show their understanding of numbers.



### **Numbers Through 20**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

draw a picture to represent amounts up to 20

#### **Materials**

- counters
- "All Apples" activity page

## **Drawing Quantities to 20**



## **Activate**

- 1. Help your student count out 20 counters.
- 2. Help them arrange the counters into a group of 5 rows with 4 counters in each row.
- 3. Explain to your student this grouping will help them count more easily.



- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Finish the **Read It** by completing the Self Check.
- 3. It is always fun to have your student help you count out items. While preparing dinner, have your student help count out the number of chicken nuggets they will eat or ask your student to count the number of toys they clean up before bedtime. Correct counting is essential for number sense.



- 1. Open the **Assess It** and follow the directions to demonstrate your student's knowledge.
- 2. When they are finished, submit the activity page by scanning the document or taking a photo of it and uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

**One More** 

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

add one more to a group of objects

#### **Materials**

- 2 cups
- 5 crayons
- "One More" activity page

## **Counting One More**



### **Activate**

- 1. Place 2 crayons in one cup and 3 crayons in the other cup.
- 2. Help your student take out the crayons and count how many are in each cup.
- 3. Explain to your student that the one cup has one more crayon in it.



#### **Engage**

- 1. Begin with the **Read It** and read about counting one more.
- 2. See if your student can add one more to the ten frames without recounting the group!
- 3. Next, view the **And the Sum Is Watch It** together. Pause the video as needed to discuss the content.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice counting one more.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. To continue to practice counting one more, have your student count a set of glasses. Then ask them how many glasses there would be if you added one more to the set.



#### **Topic**

#### **One More**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 count by memory to write how many are in a group when adding one more

#### **Materials**

 "Writing One More" activity page

## **Writing One More**



#### **Activate**

- 1. Have your student draw a picture of a birthday cake with the amount of candles that represents their age.
- 2. Have your student draw another candle on their cake to represent how old they will be on their next birthday. Count each candle aloud with your child as they touch each one.



## **Engage**

- 1. Begin with the **Read It** and read about how to write a number when an additional object is added to the group.
- 2. Emphasize that you are adding one more to a group, and finish with the Self Check.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice adding one more.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. To continue practicing, have your student count the plates in the cupboard. Then, have them tell you how many plates there would be if they added one more.



**Topic** 

**One More** 

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

draw pictures to represent consecutive amounts for groups of objects

#### **Materials**

- 3 balls
- bucket
- dry erase board and marker
- "Beach Balls" activity page
- crayons

## **Drawing One More**



## **Activate**

- 1. Set up the bucket about 5 to 10 feet away from your student.
- 2. Have your student toss the first two balls into the bucket, asking them to count as the ball enters the bucket.
- 3. Before you hand your student the last ball, ask them, "If you toss this ball into the bucket, how many balls will be in your bucket?"
- 4. Have your student toss the final ball, and then discuss that there are now 3 balls in the bucket.



- 1. Begin with the **Read It** and complete the activity for drawing an additional object in a group.
- 2. Emphasize the definition of consecutive. Finish with the Self Check.



- 1. Open the **Assess It** and have your student complete the activity to demonstrate their knowledge.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



#### **Topic**

#### **Place Value**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- create numbers from 11 to 19 using objects
- create numbers from 11 to 19 using drawings

#### **Materials**

base ten blocks

### **Compose with Base Ten**



#### **Activate**

- 1. Help your student create the numbers 1 through 10 with base ten blocks.
- 2. Tell them five different numbers from 1 through 10, and have them count out base ten blocks to represent each number.



- 1. Begin with the **Read It** and help your student understand that the numbers 11 through 19 are made up of a group of ten and a number of ones.
- 2. As a suggestion, you can use the base ten blocks to help your student see what makes up the numbers 11 through 19.
- 3. Finish with the Self Check.



## **Demonstrate**

- 1. Move on to the **Show It** and follow the directions to create the numbers using base ten blocks.
- 2. Finally, use the **Show It AK** to work with your student to check their answers.

## **Compose with Drawings**



- 1. Continue with the **Read It** and help your student use drawings to show the numbers 11 through 19.
- 2. Finish with the Self Check.
- 3. Next, view the **Teen Numbers: Monkeys Watch It** together. Pause the video as necessary to discuss the makeup of the numbers.



- 1. Move on to the **Show It** and follow the directions to draw base ten blocks.
- 2. Use the **Show It AK** to work with your student to check their answers.
- 3. For extra practice, have your student compose numbers with blocks during play time.



#### **Topic**

#### **Place Value**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- break apart numbers from 11 to 19 using objects
- break apart numbers from 11 to 19 using drawings

#### **Materials**

- base ten blocks
- marshmallows

### **Decompose with Base Ten**



#### **Activate**

- 1. Have your student draw a picture of 5 stars.
- 2. Help your student place a base ten unit on each star, and count each unit as it is placed on each drawing.



## **Engage**

- 1. Begin with the **Read It** and help your student understand that decomposing a number means to break it into smaller parts.
- 2. As a suggestion, you can use the base ten blocks to help your student see what makes up the numbers 11 through 19.
- 3. Finish with the Self Check.



## **Demonstrate**

- 1. Move on to the **Show It** and follow the directions to decompose the numbers using base ten blocks.
- 2. Finally, use the **Show It AK** to work with your student to check their answers.

## **Decompose with Drawings**



- 1. Continue with the **Read It** and help your student use drawings to break apart numbers.
- 2. It may be helpful to reference the base ten blocks while discussing the drawings, and show your student how using drawings is like using the base ten blocks.
- 3. Finish with the Self Check.



- 1. Move on to the **Show It** and follow the directions to decompose numbers using drawings.
- 2. Finally, use the **Show It AK** to work with your student to check their answers.
- 3. To continue practicing, have your student create the number 14 using marshmallows to make a ten rod and 4 units. They can wet the ends of the marshmallows to have them stick together to make the rod.



#### **Place Value**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

represent numbers 11 through 19 by drawing

#### **Materials**

- 10 index cards
- base ten blocks
  - dry erase board and marker

#### **Compose 11-19**



## **Activate**

- 1. Create a memory matching game with your student using index cards. Have your student write each of the following numbers and expressions on a card:
  - 11 10+1 14 10+4 15 10+5 18 10+8 19 10+9
- 2. Place the cards face down in a random order.
- 3. Have your student match the cards that represent the same number. While you play, review how to create numbers from 11 through 19.



- 1. Begin with the **Read It** and help your student understand that composing numbers means to put parts of a number together.
- 2. As a suggestion, use the base ten blocks as you move through the content and use the dry erase board when it is time to draw the picture.



- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

#### **Place Value**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

write expressions to represent numbers 11 through 19

#### **Materials**

base ten blocks

## **Write Composition Expressions**



## **Activate**

- 1. Have your student create the first letter of their name using base ten blocks.
- 2. Help them count the number of base ten blocks they used to make their first initial. Try another letter for fun!



- 1. Begin with the **Read It** and help your student understand that they are focusing on writing two numbers that make up each of the numbers from 11 through 19.
- 2. Use the base ten blocks as you move through the content.



- 1. Move on to the **Show It** and follow the directions to write expressions.
- 2. Finally, use the **Show It AK** to work with your student to check their answers.
- 3. Have your student try additional numbers for extra practice.



#### **Place Value**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use equations to represent the decomposition of numbers 11 through 19

#### **Materials**

- chocolate bar
- base ten blocks

## **Decomposition Expressions**



#### **Activate**

- 1. Give your student a chocolate bar that has sections. Have them break apart each section and count the sections as they are broken.
- 2. Help your student use the chocolate bar sections to compose different numbers.



- 1. Begin with the **Read It** and help your student understand that decomposing a number means to break it into smaller parts.
- 2. As a suggestion, you can use the base ten blocks to model the content during the reading of the lesson. Finish with the Self Check.



- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the Assess It.
- 3. Open the Reinforce It and it read more about decomposition expressions. Finish with the activity to match numbers with expressions.



**Topic** 

#### **Count to Answer Questions**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

line up objects while counting up to 20

#### **Materials**

- · empty egg carton
- counters
- cup

## **Lining Up Counters**



## **Activate**

- 1. Have your student place one counter in each section of the empty egg carton.
- 2. Help your student count each counter as they place them in the sections.



#### <u>Engage</u>

- 1. Begin with the **Read It** and help your student practice lining up counters as they count.
- 2. Emphasize the importance of neatly lining up the objects to count. Finish with the Self Check.



- 1. Next, move on to the **Show It** and have your student complete the activity by placing counters in a straight line.
- 2. Finally, use the **Show It AK** and work with your student to check their varying answers.
- 3. To continue to practice counting in a line, have your student line up their rolls of socks while they help you fold laundry. Ask them to count the sock rolls in the line.



**Topic** 

#### **Count to Answer Questions**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

count an array of 20 objects

#### **Materials**

- dry erase board and marker
- "Coloring with an Array" activity page
- crayons

## **Counting with an Array**



## **Activate**

- 1. Draw a board for a game of Tic-Tac-Toe. Determine with your student who will use Xs and who will use Os.
- 2. Play the game with your student a few times. After you're finished, have your student count the number of squares on the Tic-Tac-Toe board.



- 1. Begin with the **Read It** and read about how to count using an array.
- 2. Review the definition of array, and ask your student what they notice about arrays. Discuss that arrays are in a neat line and easier to count than in a messy group. Finish with the Self Check.
- 3. Have your student try to make their own array on the dry erase board.



- 1. Next, move on to the **Show It** and have your student complete the activity by coloring and counting arrays.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. To continue practicing, you could have your student use a checkerboard and checkers to create arrays using the squares on the board.



**Topic** 

#### **Count to Answer Questions**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

count objects arranged in a circle

#### **Materials**

- "Counting in a Circle" activity page
- counters
- crayons
- · dry erase board and marker

## **Counting in a Circle**



#### **Activate**

- 1. Ask your student if they can find objects that are circular in shape.
- 2. Help your student trace the outside of the objects with their finger.



#### **Engage**

- 1. Begin with the **Read It** and help your student practice counting in a circle.
- 2. Brainstorm with your student and think of objects that are in a circular shape. Finish with the Self Check.
- 3. Have your student arrange counters in a circle and practice counting them as they point to each counter. To ensure your student does not count their starting point twice, have them place their finger on the first one and use their other hand to count around the circle.
- 4. Open the **Counting Objects in Circle Watch It** and watch the video with your student. Pause the video as necessary to discuss the content.
- 5. Emphasize to your student that remembering not to count the top object twice is important.



- 1. Next, move on to the **Show It** and have your student complete the activity by coloring and counting objects arranged in a circle.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. To continue practicing, have your student place a set of toys in a circle and count them.



**Topic** 

#### **Count to Answer Questions**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

count and number an array of 20 objects

#### **Materials**

- muffin pan or empty egg carton
- dry erase board and marker
- counters
- "Numbering an Array" activity page

## **Numbering an Array**



## **Activate**

- 1. Help your student place a counter in each section of the muffin pan or egg carton. Every time they place a counter in a section, have them count aloud.
- 2. Ask your student what the design of the muffin pan or egg carton looks like. If they do not say "array," ask questions about the ease of counting something in a uniform order.



- 1. Begin with the **Read It** and read about numbering an array.
- 2. Emphasize the definition of array, and finish with the Self Check.
- 3. Have your student try to make their own array with numbers on the dry erase board.



- 1. Next, use the **Assess It** and have your student complete the activity.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the Assess It.





#### **Count to Answer Questions**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- count groups of up to 20 pennies by arranging them in sets
- count and write how many objects are in an array, up to 20

#### **Materials**

- "Counting Pennies" activity
- 20 pennies
- dry erase board and marker
- counters
- "Crossing an Array" activity page
- calendar

#### **Counting Pennies**



## Activate

- 1. Create two arrays of 10 pennies. Make one array scattered and the other one neat.
- 2. Count with your student, touching each penny as you count.
- 3. Ask your student which array was easier to count.



- 1. Begin with the **Read It** and help your student practice lining up their own pennies to count.
- 2. Emphasize how to use lines of 5 to make counting easier, and finish with the Self Check.
- 3. Open the A Penny to Spare Watch It and watch the video with your student. Pause the video as necessary to discuss the content and count.



- 1. Next, move on to the **Show It** and have your student complete the activity to count pennies.
- 2. Suggest to your student that they can put a mark, such as an "X," to mark the pennies they have already counted.
- 3. Use the **Show It AK** and work with your student to check their answers.
- 4. Proceed to the **Extend It** to learn more about counting pennies.

## **Crossing an Array**



- 1. Continue with the **Read It** and read about rows and columns of an array.
- 2. Explain to your student that they can choose the method that works best for them when counting items in an array, either numbering the items or crossing them out. Finish with the Self Check.
- 3. Have your student try to make their own array with numbers on the dry erase board and emphasize how to cross out a counted object with a line or an "x."



- 1. Next, use the **Show It** and complete the activity by numbering or crossing out the objects in the array.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. To continue practicing, have your student look at a calendar. Explain to them that the calendar is a type of array. Show your student that they can cross off the days like they do when counting items.



#### **Count to Answer Questions**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

choose the appropriate method to count up to 10 objects

#### **Materials**

- dry erase board and marker
- counters
  - "Careful Counter" activity page

## **Methods of Counting**



## **Activate**

- 1. Scatter a random group of counters on a flat surface.
- 2. Have your student count the counters, and be careful to note how they choose to count the counters. You will refer to their method in the Engage section.



- 1. Begin with the **Read It** and help your student practice different ways to count groups of objects.
- 2. Explain to your student that all the methods of counting work, and they can choose the way that works best for them. Refer to their chosen method in the Activate section.
- 3. Ask your student if they can think of any other methods for counting and discuss why their answer will or will not work. Finish with the Self Check.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice different ways to count the objects.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. To continue practicing, have your student draw a group of objects for you to count. Choose one of the counting methods discussed in the lesson to count the objects. Ask your student to identify which method you chose.



#### **Greater, Less, Equal**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- identify the larger group by comparing two groups of objects to 10
- identify the smaller group by comparing two groups of objects to 10

#### **Materials**

- pennies
- pencils

#### Greater to 10



## **Activate**

- 1. Have your student stand up next to you.
- 2. Ask them which one of you is bigger and which one of you is smaller.
- 3. Tell your student that you are going to use their counting skills to determine greater and lesser groups of objects.



- 1. Begin with the **Read It**. Help your student practice counting and comparing two groups of objects, and ask them to choose the group with more objects.
- 2. Explain to your student that they can line up the objects to count them more easily. Finish with the Self Check.
- 3. Continue with the Sets with More Watch It and view the video together. Pause the video as necessary to discuss comparing two sets of objects.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice counting and comparing two groups of objects. Emphasize choosing the group that is greater.
- 2. Then, use the **Show It AK** and work with your student to check their answers.
- 3. To continue practicing, have your student count how many spoons and how many forks are in the silverware drawer. Ask them to identify the group that is greater.

#### Less to 10



- 1. Continue with the **Read It**. Help your student practice counting and comparing two groups of objects, and ask them to choose the group with less objects.
- 2. Explain to your student that if the line is shorter, it does not always mean that the group has less. The objects might be smaller, so it is important to count carefully. Finish with the Self Check.
- 3. Continue with the **I Spy a Set Watch It** and view the video with your student. Pause it as necessary to discuss comparing two sets of objects and choosing which group of objects has less.



- 1. Open the **Assess It** and have your student complete the activity. Copy the list onto a sheet of paper and have your student write the word less beside the group with fewer objects.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

#### **Greater, Less, Equal**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 identify equal groups by comparing two groups of objects to 10

#### **Materials**

- 2 cups
- water
- pennies
- pencils

### **Equal Groups**



## **Activate**

- 1. Fill the two cups with water so that one cup has more water than the other.
- 2. Ask your student which cup has the greater amount of water and which cup has the lesser amount of water.
- 3. Explain to your student that they will be learning what it is called when the two cups have *the same* amount of water.



- 1. Begin with the **Read It** and help your student practice counting and comparing two groups of objects to determine whether or not they are equal.
- 2. Explain to your student that *equal* means the groups have the same amount of objects. Finish with the Self Check.



- 1. Next, move on to the **Show It** and have your student complete the activity. It may be helpful to set out the objects prior to the student counting and determining whether or not the group is equal.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student fill the cups with objects to make equal groups. Make sure your student is putting the same number of objects in the cups and not just filling them to the same level.



#### **Greater, Less, Equal**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- identify the larger group by comparing two groups of objects to 20
- identify the smaller group by comparing two groups of objects to 20

#### **Materials**

- 10 base ten blocks
- pennies
- pencils

#### Greater to 20



### **Activate**

- 1. Help your student make two stacks of base ten units, one with 7 units and one with 3 units.
- 2. Ask your student which set is *greater than* and which set is *less than*.



## <u>Engage</u>

- 1. Begin with the **Read It** and help your student practice counting and comparing two groups of objects in order to choose the group with more objects.
- 2. Explain to your student that they can line up the objects to count them more easily. Finish with the Self Check.
- 3. Continue with the Estimating More Than Watch It and view the video with your student. Pause it as necessary to discuss comparing two sets of objects.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice counting and comparing two groups of objects. Emphasize choosing the group that is greater.
- 2. Then, use the **Show It AK** and work with your student to check their answers.
- 3. At the next snack time, hand out unequal portions. Have your student and a sibling or friend determine who has more.

#### Less to 20



- 1. Continue with the **Read It** and help your student practice counting and comparing two groups of objects in order to choose the group with less objects.
- 2. Remind your student of the importance of neatly lining the objects up to count. Finish with the Self Check.
- 3. Continue with the **Estimating Less Than Watch It** and view the video with your student. Pause it as necessary to discuss comparing two sets of objects and choosing which group of objects has less.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice counting and comparing two groups of objects. Emphasize choosing the group that has less.
- 2. Then, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, ask your student if there are more cars or trucks on the road the next time the two of you are out. Finding groups of objects that they can compare will help them to see how they will use math everyday!





#### **Greater, Less, Equal**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- identify the greater number by comparing two numbers up to 10 on a number line
- identify the lesser number by comparing two numbers up to 10 on a number line

#### **Materials**

- number line 0-10
- counters

#### **Greater to 10 Number Line**



#### **Activate**

- 1. Place 5 counters on the number line between 0 and 10.
- 2. Have your student identify each number on the number line that was marked by a counter.



### Engage

- 1. Begin with the **Read It** and help your student practice identifying which number is greater by using a number line.
- 2. As a suggestion, use counters to mark the places of the numbers on the number line. Finish with the Self Check.
- 3. Remind your student that the numbers to the right are greater than the numbers to the left.



## **Demonstrate**

- 1. Next, move on to the **Show It** and have your student complete the activity to practice comparing two numbers on a number line.
- 2. Then, use the **Show It AK** and work with your student to check their answers.

#### **Less to 10 Number Line**



- 1. Continue with the **Read It** and help your student practice identifying which number is less by using a number line.
- 2. Remember to use counters to mark the places of the numbers on the number line. Finish with the Self Check.
- 3. Remind your student that numbers to the left are less than the numbers to the right.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice comparing two numbers on a number line.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice with a number line, take your student to the deli line in a grocery store where you get a number and are waited on according to your number. Discuss that your number is greater than some people's and less than other people's number.



**Topic** 

#### **Greater, Less, Equal**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

count groups of objects with the same amount by memory

#### **Materials**

- building blocks
- "Equal Groups" activity page

## **Counting Equal Groups**



## **Activate**

- 1. Have your student look at a group of blocks.
- 2. Help your student to make another group of blocks that is equal to the first group. Discuss that there are the same number of blocks in each group.



- 1. Begin with the **Read It** and read about equal groups while discussing the definition of an equal sign.
- 2. It may be helpful to emphasize that objects do not need to be arranged the same way in order to be equal.
- 3. Finish with the Self Check.



- 1. Move on to the **Show It** and follow the directions to complete the activity page about counting equal groups.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. To continue to practice, have your student make multiple block towers of equal amounts during play time.



#### **Topic**

#### **Greater, Less, Equal**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- make two equal groups of even amounts of up to 20 objects
- identify *greater than, less than,* or *equal* to in pairs of groups of up to 50 objects

#### **Materials**

- 2 playing dice
- pennies
- "Greater, Less, Equal" activity page
- buttons
- construction paper

#### **Making Equal Groups**



## **Activate**

- 1. Give your student a playing die and keep one for yourself. Both of you roll the dice at the same time.
- 2. After the rolls, look at both of the dice and help your student determine who rolled the greater number, who rolled the lesser number, or if the die displayed equal numbers. Try this five times.



- 1. Begin with the **Read It** and help your student practice counting out equal groups of pennies.
- 2. Remind your student to keep their groups of pennies in a neat line in order to see the equal groups clearly. Finish with the Self Check.



#### **Demonstrate**

- 1. Open the **Assess It** and have your student complete the activity.
- When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the Assess It.
- 3. For more practice, move on to the **Reinforce It** and continue reading about making equal groups. Have your student complete the matching activity.



#### **Choose a Method**



- 1. Continue with the **Read It** and help your student determine the difference between the *greater than, less than,* and *equal to* symbols.
- 2. As a suggestion, tell them that if they make the greater than symbol (>) with their arms, they are a crocodile eating the lesser amount. Finish with the Self Check.
- 3. Open the **How to Compare Numbers Watch It** and view the video with your student. Pause it as necessary to practice counting the equal groups and to discuss the content.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice comparing groups of objects.
- 2. Then, use the **Show It AK** and work with your student to check their answers.
- 3. For even more practice, have your student compare produce choices in a grocery store. Have them create a *greater than* symbol if there are more apples than lemons. Have them create the *less than* symbol if there are less eggplants than potatoes. They can create an *equal to* symbol if the number of green apples is equal to the number of red apples. This type of activity is a fun way to relate math to the world in which your student lives.



**Topic** 

#### **Greater, Less, Equal**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 explain how to compare two groups of objects using greater than, less than, or equal to

#### **Materials**

- 2 cups
- counters
  - number line 0 10

#### **Explain Verbally**



## **Activate**

- 1. Place a random amount of counters in each cup. Help your student count out the counters in the cup and predict if that cup's contents is going to be *greater than, less than,* or *equal to* the counters in the second cup.
- 2. Have your student count the counters in the second cup. Ask them if their prediction was correct and discuss the results.



- 1. Begin with the **Read It** and help your student practice comparing different groups of objects. Finish with the Self Check.
- 2. Next, open the **Comparing More or Less Watch It** and view the video with your student. Emphasize the comparison between *greater than* and *more than* and *less than* and *smaller than*. Pause the video as needed to discuss the content.



- 1. Move on to the **Show It** and follow the directions to practice choosing a method to determine *greater* than, less than, or equal to groups.
- 2. Finally, use the **Show It AK** to work with your student to check their answers.
- 3. To continue practicing, give your student a set of your rolled socks and a set of their rolled socks and have them choose a method to compare the sets. Have your student explain to you the method they used and discuss why they chose this method.



**Topic** 

## **Describe and Compare Attributes**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

describe the length, weight, size, and color of an object

#### **Materials**

none required

#### **Describe Attributes**



## **Activate**

- 1. Help your student find 2 objects of the same size and 2 objects of the same color.
- 2. Discuss how the objects are similar and how the objects are different with your student.



## **Engage**

- 1. Begin with the **Read It** and help your student describe the objects.
- 2. Practice describing objects found around you by discussing their length, weight, size, and color. Be sure to include the objects from the Activate. Now, discuss their length and weight.
- 3. Open the **Paired Up Watch It** and view the video with your student. Pause it as needed to discuss the content.



- 1. Next, move to the **Assess It** and have your student complete the activity.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

## **Describe and Compare Attributes**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

· compare objects by identifying differences

#### **Materials**

- 2 stuffed animals
- 2 books

#### **Describe Differences**



## **Activate**

- 1. Help your student find two stuffed animals and two books. Arrange the sets near them.
- 2. Discuss how the books are the same and how they are different. Maybe one book has more pages or one has a hard cover, while the other has a soft cover. Do the same with the stuffed animals.



- 1. Begin with the **Read It** and help your student describe the differences between the objects.
- 2. Your student can practice by describing the differences between objects found around them.
- 3. Open the I Sort of Figured Watch It and watch the video with your student. Pause it as necessary to discuss the content.
- 4. Open the **Antigua's Artifacts-Alike or Different Play It** and play the game with your student. Feel free to play the game a second time to help your student master the content.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice stating differences.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student identify differences in toys during playtime or in their surroundings while out and about.





#### **Describe and Compare Attributes**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

describe attributes of objects by using comparative

#### **Materials**

- construction paper, different colors
- scissors

#### More or Less Of



#### **Activate**

- 1. Help your student cut out random strips of construction paper of different colors and different sizes.
- 2. Help your student arrange the cut pieces by color and then again by size.



- 1. Begin with the **Read It** and help your student use comparative language to describe the objects.
- 2. For more practice, find objects around you to compare and describe which is taller, shorter, heavier, lighter, and so on.
- 3. Open the **Sets with More Watch It** and watch the video with your student. Pause it as necessary to discuss the content.
- 4. Continue with the I Spy a Set Watch It and watch the video with your student. Discuss the content, and pause the video as needed.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice comparing objects.
- 2. Remind your student of the comparing words in the lesson.
- 3. Then, use the **Show It AK** and work with your student to check their answers.
- 4. For more practice, take this time to use the construction paper pieces to continue using the comparing words learned in the lesson.



**Topic** 

## **Describe and Compare Attributes**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

compare objects by their color

#### **Materials**

- coloring page
- crayons

## **Compare by Color**



## **Activate**

- 1. Help your student color the coloring page.
- 2. Discuss the coloring page with your student. Ask them what color an object is and how big or small objects are on the page.



- 1. Begin with the **Read It** and help your student compare the colors of different objects.
- 2. As a suggestion, practice comparing colors of objects found around you. Finish with the Self Check.
- 3. Open the **All Sorts of Colors Watch It** and view the video with your student. Pause it as necessary to discuss the content.
- 4. Open the **Sensei's Sequence-Shade Play It** and play the game with your student. Feel free to play the game a second time to help them master the content.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice comparing colors.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For further practice, throughout the day ask your student to compare items with different colors, such as passing cars, signs, or toys.



**Topic** 

## **Describe and Compare Attributes**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

compare objects by their size

#### **Materials**

modeling clay

## **Compare by Size**



#### **Activate**

- 1. Help your student roll random sized balls of clay.
- 2. Have your student arrange the balls into groups according to their size.



#### <u>Engage</u>

- 1. Begin with the **Read It** and help your student compare the sizes of different objects.
- 2. To continue to practice, have your student find objects around them and compare their size. You can even compare your size to your student's size! Finish with the Self Check.
- 3. Open the **Out of Sorts Watch It** and watch the video with your student. Pause it as necessary to discuss the content.
- 4. Continue with the **Sensei's Sequence-Books Play It** and play the game with your student. Feel free to play the game a second time to help them master the content.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice comparing sizes.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For further practice, the next time laundry needs to be folded, have your student arrange the balls of socks by size and see if they are ordered according to the same family member.



#### **Describe and Compare Attributes**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

compare objects by their weight

#### **Materials**

- small ball
- large ball
- building blocks

## **Compare by Weight**



### **Activate**

- 1. Have your student build a small tower and a larger tower with the building blocks. Discuss the similarities and differences with your student.
- 2. Toss the small ball back and forth a few times with your student. Then, toss the large ball back and forth a few times. Discuss the similarities and differences with your student.



#### **Engage**

- 1. Begin with the **Read It** and help your student compare the weights of different objects.
- 2. Your student can practice by comparing the weights of objects found around them. If you have a scale, feel free to use it to help your student check their answers. Finish with the Self Check.
- 3. Open **The Balance of it All Watch It** and watch the video with your student. Pause it as necessary to discuss the content.
- 4. Continue with the **Scales Measure Weight Watch It** and watch the video with your student. Pause it as needed to discuss content.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice comparing weights of different objects.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For more practice, have your student practice weighing things with a scale at the grocery store. Have them guess which food would be heavier and which would be lighter.



#### **Describe and Compare Attributes**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

compare objects by their length

#### **Materials**

- package of gummy worms
- ruler

## **Compare by Length**



## Activate

- 1. Help your student arrange the gummy worms according to size. (You may need to cut the worms into various sizes.) Put the smallest ones first, and as they get larger, set them under the previous worm.
- 2. Continue this until all the worms are arranged from shortest to longest, like so:

_
and so on.



#### Engage

- 1. Begin with the **Read It** and help your student compare the lengths of different objects.
- 2. For extra practice, find objects around you to compare their length. Finish with the Self Check.
- 3. Open The Sock Game Watch It and view the video with your student. Pause it as necessary to discuss content.
- 4. Continue with the **Sorting Silverware Watch It** and watch the video with your student. If necessary, pause the video to discuss the content.
- 5. You could have your student organize their silverware from longest to shortest in their own drawer!
- 6. Next, have your student engage in the **Measure Mania-Measure Play It**. This game reviews the different tools used to measure in different ways.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice comparing
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For continued practice, have your student help measure items with a ruler to compare their lengths.



**Topic** 

#### **Describe and Compare Attributes**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

compare objects by their weight

#### **Materials**

- 2 paper bags
- 1 small, heavy object
- 1 small, light object
- index cards

## **Compare Weights**



## **Activate**

- 1. Without your student seeing you, put the small, heavy object in one brown paper bag and label it *A*. Put the small, light object in the other paper bag and label it *B*. Fold down the tops of the bags so your student cannot see inside of them.
- 2. Have your student examine the bags without opening them. Ask them to make a prediction about what is in each bag.



#### **Engage**

- 1. Begin with the **Read It** and help your student compare the weights of different objects using the words *heavier* and *lighter*.
- 2. As a suggestion, practice by comparing the weights of objects found around you and your student. If you have a scale, feel free to use it to help your student check their answers. Use this opportunity to weigh the paper bags from the Activate section. Finish with the Self Check.
- 3. Open the **That's Heavy Watch It** and view the video with your student. Pause it as needed to discuss the content.



- 1. Finally, open the **Assess It** and have your student complete the activity.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.
- 3. When your student is finished, have them open the paper bags and hold the objects in their hands. Discuss their predictions, whether or not they were correct, and which object is heavier and which is lighter.



**Topic** 

#### **Describe and Compare Attributes**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

compare objects by their length

#### **Materials**

- crayon
- pencil
- marker
- index cards

#### **Compare Lengths**



## **Activate**

- 1. Have your student describe the crayon, pencil, and marker using attributes that they have learned.
- 2. Help your student arrange the three objects in front of them in no particular order.



#### **Engage**

- 1. Begin with the **Read It** and help your student compare the lengths of different objects using the words *longer* and *shorter*.
- 2. Your student can practice by comparing lengths of objects found around them. If you have a ruler, feel free to use it to help your student check their answers. Take this opportunity to use the objects from the Activate section and arrange them from shortest to longest. Finish with the Self Check.
- 3. Open the **Taller, Shorter, Longer Watch It** and view the video with your student. Pause it as necessary to discuss the content.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice comparing lengths of different objects.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. To continue to practice, find other objects shorter and longer than the writing utensils from the Activate section to compare lengths.



**Topic** 

## **Describe and Compare Attributes**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

compare objects by their area

#### **Materials**

index cards

## **Compare Areas**



## **Activate**

- 1. Walk with your student through different rooms. In each room, ask your student, if it is bigger, smaller, or the same in comparison to the previous room.
- 2. Make a list of small rooms and big rooms.



- 1. Begin with the **Read It** and help your student compare the areas of different objects using the words *bigger* and *smaller*.
- 2. To practice, have your student compare areas of objects found around them. Finish with the Self Check.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice comparing areas of different objects.
- 2. Then, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, print out a layout of a house, and help your student identify the bigger and smaller rooms.



**Topic** 

#### **Describe and Compare Attributes**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

compare objects by their capacities

#### **Materials**

- cup
- bucket
- water
- index cards

#### **Compare Capacities**



## **Activate**

- 1. Have your student fill the cup with water. Ask them if it took a long time or a short time to fill the whole cup.
- 2. Have your student fill the bucket with water. Ask them if it took a long time or a short time to fill the whole bucket. Keep these filled for later in the lesson.



- 1. Begin with the **Read It** and help your student compare the capacities of different objects using the words *more* and *less*.
- 2. Next, try comparing the capacities of objects found around you.
- 3. Then, compare the capacities of the cup and the bucket from the Activate section. Have your student empty the cup of water and the bucket of water and ask them which took longer to empty. Explain to them that the time it takes to empty each container can help them determine that the bucket has more capacity and that the cup has less capacity. Finish with the Self Check.
- 4. Open the **What Is Capacity? Watch It** and watch the video with your student. Pause the video as necessary to discuss the content.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice comparing the capacities of the different objects.
- 2. Use the **Show It AK** and check the answers together.
- 3. Finally, have your student complete the **Extend It** for an additional review of the different attributes of objects.
- 4. For further practice, have your student fill up different bowls, pitchers, and pots from the kitchen, comparing their capacities.



#### **Topic**

#### **Describe and Compare Attributes**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 compare objects by their attributes such as length, weight, size, or color

#### **Materials**

- paper
- red, yellow, and blue crayons
- scissors

## **Compare Attributes**



#### **Activate**

- 1. Help your student draw ten shapes that are different sizes.
- 2. Have your student color the different shapes using the differently colored crayons.



## **Engage**

- 1. Begin with the **Read It** and help your student compare the attributes of different objects.
- 2. As a suggestion, practice comparing attributes of objects found around you and your student. Take this opportunity to have your student cut out the shapes created in the Activate section. Have them sort the shapes according to the attributes of their characteristics and discuss. Finish with the Self Check.
- 3. Open the **Comparing Mrs. Triggle Watch It** and view the video with your student. Pause it as necessary to discuss the content.
- 4. Open the **Antigua's Artifacts-Matching Play It** and play the game with your student. Feel free to play the game multiple times or until your student has mastered the content.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice comparing the attributes of different objects.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Finally, use the **Extend It** to extend your student's knowledge about comparing attributes. Finish with the activity by matching the object identified on each card to its appropriate attribute.



#### **Numbers Through 50**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 count aloud from 1 to 50 by memory, starting at different numbers

#### **Materials**

none required

#### **Rote Count Forward to 50**



#### **Activate**

- 1. Ask your student if they can count to 50 starting from the number 38.
- 2. Have your student choose a number less than 50, then ask them to start with that number and continue counting to 50.



- 1. Begin with the **Read It** and read the content aloud to your student while they follow along.
- 2. Have your student choose their own starting number and practice counting to 50 while hopping.



- 1. Open the **Assess It**, read the instructions, and have your student complete the activity to demonstrate their knowledge.
- 2. When your student is finished, submit the numbers they missed by scanning the document or taking a photo of it and uploading it to the Dropbox. If your student did not miss any numbers, write "All correct" on your paper and submit it via the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

#### **Numbers Through 50**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- · count aloud from 0 to 30 using a number line
- count aloud from 1 to 30 using a hundreds chart

#### **Materials**

- number line 0 30
- 30 paper clips
- · printed hundreds chart
- yellow crayon
- monthly calendar

## **Number Line - Thirty**



## **Activate**

- 1. Give your student 30 paper clips.
- 2. Ask your student if they can lay out the paper clips in a row that represents a number line.



#### **Engage**

- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Ask your student to practice counting their paper clips, pointing to each one as they count aloud.



## **Demonstrate**

- 1. Now move on to the **Show It** and follow the directions to practice counting using a number line.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.



## **Hundreds Chart - Thirty**



## **Activate**

- 1. Have your student color the third row of the hundreds chart yellow (numbers 21-30).
- 2. Ask your student if they know how many rows they will look at on the hundreds chart if they count to 30.

# E

#### **Engage**

- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Use the yellow row on the hundreds chart to practice counting from 21-30.



- 1. Next, move on to the **Show It** and follow the directions to practice counting using a hundreds chart.
- 2. Now use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student practice counting to thirty using a monthly calendar.



**Topic** 

#### **Numbers Through 50**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

relate names of numbers up to 20

#### **Materials**

calendar

#### **Numbers on a Calendar**



## **Activate**

- 1. Ask your student to find a calendar.
- 2. Have your student point out the current day on the calendar.



#### <u>Engage</u>

- 1. Begin with the **Read It** and have your student follow the directions to complete the activity.
- 2. Open the **Look and Find-Letters and Numbers Play It**, read the directions, and have your student play the game.
- 3. Your student may play the game multiple times or until the numbers and letters begin to repeat.



- 1. Now move to the **Show It** and have your student complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, show your student other parts of a calendar, the days of the week, all of the months, and the following year.



**Topic** 

#### **Numbers Through 50**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- count aloud from 0 to 40 using a number line
- count aloud from 1 to 40 using a hundreds chart

#### **Materials**

- number line 0 40
- printed hundreds chart
- green crayon
- base ten blocks

## **Number Line - Forty**



## **Activate**

- 1. Ask your student if they can do 40 jumping jacks.
- 2. Have the students count each jumping jack as they do them.



## **Engage**

- 1. Begin with the **Read It** and follow the directions to count using a number line.
- 2. Have your student practice counting a second time for reinforcement.



## **Demonstrate**

- 1. Move on to the **Show It** and follow the directions to practice counting using a number line.
- 2. Use the **Show It AK** and work with your student to check their answers.



## **Hundreds Chart - Forty**



## **Activate**

- 1. Have your student color the fourth row of the hundreds chart green (numbers 31-40).
- 2. Ask your student if they know how many rows they will look at on the hundreds chart if they count from 1 to 40.



#### **Engage**

- 1. Begin with the **Read It** and follow the directions to count using a hundreds chart.
- 2. Use the green row on the hundreds chart to practice counting from 31-40.



- 1. Move on to the **Show It** and follow the directions to practice counting using a hundreds chart.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. To further your student's learning, you could have them play with the ten rods and units to represent the number 40 in different ways. They can look back at the hundreds chart for reference.





#### **Numbers Through 50**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- count aloud from 0 to 50 using a number line
- count aloud from 1 to 50 using a hundreds chart

#### **Materials**

- number line 0 50
- map
- 50 pieces of pasta
- printed hundreds chart
- blue crayon

## **Number Line - Fifty**



## **Activate**

- 1. Ask your student if they know how many states make up the United States.
- 2. You can show your student a map of the 50 states.



## Engage

- 1. Begin with the **Read It** and follow the directions to count using a number line.
- 2. Have your student count out 50 pieces of pasta and line them up to practice counting to 50.



## Demonstrate

- 1. Now move on to the **Assess It** and follow the directions to demonstrate your student's knowledge.
- 2. Open the Assess It and have your student complete the activity. When they are finished, submit the numbers they missed by scanning the document or taking a photo of it and uploading it to the Dropbox. If your student did not miss any numbers, write "All correct" on your paper and submit it via the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the Assess It.



## **Hundreds Chart - Fifty**



#### **Activate**

- 1. Have your student color the fifth row of the hundreds chart blue (numbers 41-50).
- 2. Ask your student if they know how many rows they will look at on the hundreds chart if they count to 50.

# ngage

- 1. Start with the **Read It** and follow the directions to count using a hundreds chart.
- 2. Use the blue row on the hundreds chart to practice counting from 41-50.

- 1. Move on to the **Show It** and follow the directions to practice counting using a hundreds chart.
- 2. Use the **Show It AK** and work with your student to check their answers.



**Topic** 

#### **Numbers Through 50**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 count aloud in order through 50, starting at different numbers and using a hundreds chart

#### **Materials**

- printed hundreds chart
- 2 pieces of cereal

## **Using a Hundreds Chart**



## **Activate**

- 1. Explain to your student that you are going to begin counting and when you stop, have them resume counting where you left off through 100.
- 2. If your student has trouble with this, try counting with them.



- 1. Start with the **Read It** and read the content aloud to your student.
- 2. Have your student use the pieces of cereal to mark their starting and ending points on the hundreds chart.
- 3. You can also have your student point to each number as they count.



- 1. Move on to the **Show It** and have your student complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers
- 3. For extra practice, have your student fill out a blank hundreds chart, or have them fill in missing numbers from a hundreds chart.



**Topic** 

#### **Numbers Through 50**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

count sets of objects up to 50 by ones

#### **Materials**

- colored pencils
- 50 pennies

## **Object Sets to Fifty**



## **Activate**

- 1. Ask your student if they have ever counted a big number of objects.
- 2. Have your student do 50 jumping jacks, counting aloud as they do each one. If they need help, count along with them.



- 1. Begin with the **Read It** and read about counting sets of similar objects up to fifty with your student.
- 2. Your student can make their own set of objects using colored pencils. Have them practice counting aloud as they touch each pencil.



- 1. Move on to the **Show It** and follow the directions for counting the groups of objects.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For continued practice, have your student practice counting to 50 by counting out 50 pennies, one at a time.





#### **Numbers Through 50**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

relate numbers to amounts up to 50 by using objects

#### **Materials**

- 30 building blocks
- 50 counters

## **Representing Numbers to 50**



## **Activate**

- 1. Help your student count out 30 building blocks.
- 2. Help them arrange the blocks in a group of 5 rows with 6 counters in each row.
- 3. Explain to your student that this grouping will help them count more easily.



- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Next, view the Numbers 1-50 Watch It together. Pause the video and discuss the content as needed.
- 3. See if your student can figure out the missing numbers while Mrs. Triggle is counting.



- 1. Move on to the **Show It** and follow the directions.
- 2. Finally, use the **Show It AK** to work with your student to check their answers.
- 3. To reinforce counting, consider having a race with your student to see who can pick up a certain amount of toys in the quickest amount of time. Pick an arbitrary number between 1 and 50 and get started! During the fun, make sure to listen as your student counts aloud. If they skip a number, pause the game to help them count in order without errors.





#### **Numbers Through 50**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- represent quantities up to 50 by drawing a picture
- count to 50 starting at different numbers using a number line

#### **Materials**

- number line 0 50
- 42 pieces of cereal
- 50 counters
- "Apple Seeds" activity page

## **Drawing Quantities to 50**



#### **Activate**

- 1. Help your student count out 42 pieces of cereal.
- 2. Help your student arrange the pieces in a group of 6 rows with 7 counters in each row.
- 3. Explain to your student that this will help them count more easily.



### Engage

- 1. Begin with the **Read It** and follow the directions to complete the activity by drawing different quantities.
- 2. Have your student practice drawing their own quantities to 50. Finish the section with the Self Check.



## emonstrate

- 1. Read the **Show It** directions to your student and have them complete the "Apple Seeds" activity page.
- 2. Next, use the **Show It AK** to work with your student to check their answers.
- 3. Finally, use the **Extend It** to learn more about drawing quantities to 50 with tally marks.
- 4. The use of tally marks is a skill that will last a lifetime. Challenge your student to represent other numbers using tally marks throughout their day. Have your student walk around the house and record a tally mark for each light switch they find. Count together with your student to get the total number of light switches.



#### Count to 50



- 1. Continue with the **Read It** and read to your student about counting to 50 using a number line.
- 2. Have your student finish the section with the Self Check.
- 3. Open the Numbers 1 to 50 Watch It and watch the video with your student. Pause the video as necessary to discuss the content.



- 1. Move on to the **Show It** and follow the directions to practice counting to 50 starting from different points using a number line.
- 2. It may also be helpful to have your student use a hundred square or hundreds chart to count up to 50.
- 3. Finally, use the **Show It AK** and work with your student to check their answers.



#### **Topic**

#### **Numbers Through 100**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- count aloud from 0 to 60 using a number line
- count aloud from 1 to 60 using a hundreds chart

#### **Materials**

- number line 0 60
- 60 pieces of cereal
- printed hundreds chart
- purple crayon

## **Number Line - Sixty**



#### **Activate**

- 1. Ask your student to count out 60 pieces of breakfast cereal and create lines of 10 cereal pieces.
- 2. Explain that the cereal pieces that represent the numbers 1 through 10 in the first row are actually a small number line. The next row of cereal pieces will start with 11.



- 1. Begin with the **Read It** and follow the directions to count using a number line.
- 2. Have your student practice counting to 60 using the lines of cereal.



#### **Demonstrate**

- 1. Move on to the **Show It** and follow the directions to practice counting using a number line.
- 2. Listen carefully to ensure your student does not miss a number.
- 3. Use the **Show It AK** and work with your student to check their answers.



## **Hundreds Chart - Sixty**



## **Activate**

- 1. Have your student color the sixth row of the hundreds chart purple (numbers 51 to 60).
- 2. Ask your student if they know how many rows they will look at on the hundreds chart if they count to 60.

# **Engage**

- 1. Start with the **Read It** and follow the directions to count using a hundreds chart.
- 2. Use the purple row on the hundreds chart to practice counting from 51 to 60.



- 1. Now move to the **Show It** and follow the directions to practice counting using a hundreds chart.
- 2. Have your student track the numbers as they say them from left to right, pointing to each number as they go. This is also a good skill to teach for beginning readers.
- 3. Use the **Show It AK** and work with your student to check their answers.





### **Numbers Through 100**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- count aloud from 0 to 70 using a number line
- count aloud from 1 to 70 using a hundreds chart

#### **Materials**

- number line 0 70
- 70 small objects
- printed hundreds chart
- pink crayon

#### **Number Line - Seventy**



#### **Activate**

- 1. Ask your student to do 70 arm circles.
- 2. Have your student try to do the arm circles forward and backward.



## Engage

- 1. Begin with the **Read It** and follow the directions to count using a number line.
- 2. Line up the 70 small objects you gathered, and have your student practice by counting all of the objects.



#### emonstrate

- 1. Move on to the **Show It** and follow the directions to practice counting using a number line.
- 2. Use the **Show It AK** and work with your student to check their answers.



## **Hundreds Chart - Seventy**



## **Activate**

- 1. Have your student color the seventh row of the hundreds chart pink (numbers 61 to 70).
- 2. Ask your student if they know how many rows they will look at on the hundreds chart if they count to



- 1. Start with the **Read It** and follow the directions to count using a hundreds chart.
- 2. Ask your student to use the pink row on the hundreds chart to practice counting from 61 to 70.



- 1. Move on to the **Show It** and follow the directions to practice counting using a hundreds chart.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. To further your student's learning, you could play a game of too big or too small using the hundreds chart. Think of a number and tell your student two numbers it is between, then ask your student to guess the number. Remind them to look at the hundreds chart to help them.



## **Topic**

## **Numbers Through 100**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- · count aloud from 0 to 80 using a number line
- count aloud from 1 to 80 using a hundreds chart

#### **Materials**

- number line 0 80
- 80 pennies
- printed hundreds chart
- gray crayon

# **Number Line - Eighty**



## **Activate**

- 1. Ask your student to count out 80 pennies. If they need help, count along with them as they count the pennies.
- 2. Have your student place the pennies in a line.



### Engage

- 1. Begin with the **Read It** and follow the directions to count using a number line.
- 2. Have your student practice counting to 80 using the pennies.



## **Demonstrate**

- 1. Move to the **Show It** and follow the directions to practice counting using a number line.
- 2. Use the **Show It AK** and work with your student to check their answers.



# **Hundreds Chart - Eighty**



# **Activate**

- 1. Have your student color the eighth row of the hundreds chart gray (numbers 71 to 80).
- 2. Ask your student if they know how many rows they will look at on the hundreds chart if they count to eighty.



## <u>Engage</u>

- 1. Start with the **Read It** and follow the directions to count using a hundreds chart.
- 2. Use the gray row on the hundreds chart to practice counting from 71 to 80.



- 1. Now move on to the **Show It** and follow the directions to practice counting using a hundreds chart.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. As a fun extension, make a puzzle out of the hundreds chart. Print out an extra copy of the hundreds chart. Cut off the rows with the numbers 81 100 and discard. Using the remaining chart with the numbers 1 80, cut it into puzzle-like pieces for your student to put back together.





## **Numbers Through 100**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- count aloud from 0 to 90 using a number line
- count aloud from 1 to 90 using a hundreds chart

#### **Materials**

- number line 0 90
- 90 paper clips
- printed hundreds chart
- white crayon

# **Number Line - Ninety**



# **Activate**

- 1. Ask your student to do 90 toe touches. If they need help counting to 90, count along with them.
- 2. Have your student line up 90 paper clips.



# **Engage**

- 1. Begin with the **Read It** and follow the directions to count using a number line.
- 2. Have your student practice counting to 90 using the paper clips.
- 3. Ensure your student is lining them up in rows of 10.



## emonstrate

- 1. Move on to the **Show It** and follow the directions to practice counting using a number line.
- 2. Now use the **Show It AK** and work with your student to check their answers.



# **Hundreds Chart - Ninety**



# **Activate**

- 1. Have your student color the ninth row of the hundreds chart white (numbers 81 to 90).
- 2. Ask your student if they know how many rows they will look at on the hundreds chart if they count to 90.

# Engage

- 1. Begin with the **Read It** and follow the directions to count using a hundreds chart.
- 2. Use the white row on the hundreds chart to practice counting from 81 to 90.



- 1. Next, look at the **Show It** and follow the directions to practice counting using a hundreds chart.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. To practice counting to ninety, try the following activity. Give your student a task to do and see if they can get it done in under 90 seconds with you counting. Then you can switch and have them count while you race to complete a task.



**Topic** 

## **Numbers Through 100**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- count aloud from 0 to 100 using a number line
- count aloud from 1 to 100 using a hundreds chart

#### **Materials**

- number line 0 100
- 100 jelly beans
- printed hundreds chart
- brown crayon

#### Number Line - 100



## **Activate**

- 1. Have your student count out 100 jelly beans. If they need help, count the jelly beans with your student.
- 2. Help your student to line up the 100 jelly beans.



# **Engage**

- 1. Start with the **Read It** and follow the directions to count using a number line.
- 2. Have your student practice counting to 100 using the jelly beans.



# **Demonstrate**

- 1. Now move on to the **Show It** and follow the directions to complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.



## **Hundreds Chart 100**



# **Activate**

- 1. Have your student color the tenth row of the hundreds chart brown (numbers 91 to 100).
- 2. Ask your student if they know how many rows they will look at on the hundreds chart if they count to 100.

## **Engage**

- 1. Start with the **Read It** and follow the directions to count using a hundreds chart.
- 2. Use the brown row on the hundreds chart to practice counting from 91 to 100.
- 3. Open the Buck's Secret Vault Number Patterns Play It and follow the directions to play the game.



- 1. Now move on to the **Assess It** and follow the directions to demonstrate your student's knowledge.
- 2. Open the **Assess It** and have your student complete the activity. When they are finished, submit the numbers they missed by scanning the document or taking a photo of it and uploading it to the Dropbox. If your student did not miss any numbers, write "All correct" on your paper and submit it via the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

## **Numbers Through 100**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- count by tens from 10 to 100 using a number line
- count by tens from 10 to 100 using a hundreds chart

#### **Materials**

- "Hundreds Chart" activity page
- red crayon
- play money

# **Number Line by Tens**



# **Activate**

- 1. Ask your student how long it takes them to count to 100. If they need help, begin counting and have them count along with you.
- 2. Ask them if they know a faster way to count to 100.



## **Engage**

- 1. Begin with the **Read It** and, with your student, read about counting by tens on a number line.
- 2. Have your student touch each number as they count aloud by tens.



## **Demonstrate**

- 1. Move on to the **Show It** and continue to practice counting by tens using a number line.
- 2. Use the **Show It AK** and work with your student to check their answers.



# **Hundreds Chart by Tens**



# **Activate**

- 1. Have your student imitate hopping as though they are playing hopscotch.
- 2. Have your student count by tens to 100 aloud with each hop.



## **Engage**

- 1. Start with the **Read It** and read about counting by tens using a hundreds chart.
- 2. Have your student point to the numbers at the end of each row as they practice.



- 1. Now move on to the **Show It** and follow the directions to practice counting by tens using a hundreds chart.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. To continue to practice, help your student count by tens while counting out \$10 bills in play money. Using money, whether play or real, is a great way for students to practice skip counting.





#### **Topic**

## **Numbers Through 100**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- count aloud from 1 to 100, starting at different numbers
- count aloud in order to 100, starting at different numbers and using a hundreds chart

#### **Materials**

- number line 0 100
- printed hundreds chart

#### **Count Forward to 100**



## Activate

- 1. Ask your student if they can count to 100.
- 2. Have your student choose a number less than 100, then ask them to start with that number and continue counting to 100.



## Engage

- 1. Begin with the **Read It** and read the content aloud to your student.
- 2. Open the Buck's Secret Vault-Number Patterns Play It, read the directions, and have your student play the game.
- 3. Your student may play the game multiple times or until the content is mastered. If your student is having trouble, have them use a number line or hundreds chart for help.
- 4. Have your student try making their own number pattern to practice.



- 1. Move on to the **Show It** and have your student complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.

# **Count Orally to 100**



## ngage

- 1. Start with the **Read It** and follow the directions for counting to 100 using a hundreds chart.
- 2. Open the Buck's Secret Vault-Dial Numbers Play It, read the directions, and have your student play the game.
- 3. Your student may play the game multiples times or until the content is mastered. If your student is having trouble, have them use a number line or hundreds chart for help.
- 4. Have your student try making their own pattern to practice.



- 1. Next, use the **Show It** and have your student complete the activity.
- 2. Your student may need assistance locating the numbers on the chart to begin.
- 3. Finally, use the **Show It AK** and work with your student to check their answers.
- 4. Counting up can sometimes be a difficult skill for young students to master. If your student needs additional practice, try repeating some of the activities that have been done.



**Topic** 

## **Numbers Through 100**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 count aloud to 100 from memory, starting at different numbers

#### **Materials**

none required

# **Count by Ones to 100**



# **Activate**

- 1. Count to your student, starting at 5 and ending at 10.
- 2. Have your student begin with 10 and continue counting to 20.



- 1. Begin with the **Read It** and follow the directions to complete the activity.
- 2. Open the **Buck's Secret Vault-Number Patterns Play It**. This game is appropriate to repeat from the prior lesson, due to its challenging nature and reinforcement of skip counting. Your student may use the hundreds chart and assistance with this game.



- 1. Next, move on to the **Show It** and have your student complete the activity.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For additional practice, you could have your student count up from different numbers using buttons, pennies, paper clips, or any item that you may have in bulk.



**Topic** 

## **Numbers Through 100**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

identify a pattern in a sequence of numbers

#### **Materials**

- printed hundreds chart
- paint, 2 colors
- 2 marshmallows

#### **Patterns on Hundreds Charts**



# **Activate**

- 1. Have your student use the marshmallows to stamp the paint on a piece of paper.
- 2. Help your student create a pattern with the two colors of paint.
- 3. Feel free to help your student to finish a pattern you begin.



- 1. Start with the **Read It** and read to your student about finding patterns on a hundreds chart.
- 2. A suggestion would be to see if your student can find any other patterns in the hundreds, or to create their own using numbers or objects. Finish with the Self Check.
- 3. Open the **Creating Number Patterns Watch It** and view the video together with your student. Pause the video as necessary to discuss content, and to solve the missing numbers.
- 4. Open the **Buck's Secret Vault-Dial Numbers Play It** and help your student play the game. Feel free to play the game multiple times or until the content is mastered.



- 1. Move on to the **Show It** and follow the directions to complete the activity of finding patterns on the hundreds chart.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Try making patterns for your student to identify the next numbers or objects in the sequence. For example, you say "9, 19, 29, 39" and ask your student what comes next. They should say "49, 59, 69!" Come up with a few more for your student to solve.



**Topic** 

## **Numbers Through 100**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

count sets of objects up to 100 by tens or ones

#### **Materials**

- ball
- 100 pennies or other small objects
- "Object Sets to 100" activity page

# **Object Sets to 100**



## **Activate**

- 1. Kick a ball back and forth 100 times with your student. You should both count aloud each time you kick.
- 2. As an alternative, you and your student can clap 100 times while counting aloud.



- 1. Begin with the **Read It** and read about counting sets of pennies up to 100.
- 2. You can have your student find another set of objects around the house to practice counting.



- 1. Open the **Assess It**, read the directions to your student, and have them complete the activity page to demonstrate their knowledge.
- 2. Once your student has completed the **Assess It** activity page, scan the document or take a photo of it, and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

#### Add and Subtract within 5

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

model addition problems within 5

#### **Materials**

- 5 beads
- pipe cleaner
- counters

# **Addition to 5 with Modeling**



# **Activate**

- 1. Have your student hold the pipe cleaner. Give them one bead to start with and help them thread it through the pipe cleaner.
- 2. Give your student two more beads and have them add them to their pipe cleaner.
- 3. Ask your student how many beads there are all together.



## **Engage**

- 1. Begin with the **Read It**. Help your student use counters to create addition problems.
- 2. Your student can continue practicing by using the beads and the pipe cleaner. Have them model a few different equations and finish with the Self Check.
- 3. Open the **Adding Numbers 0 to 3 Watch It** and watch the video with your student. Pause it as necessary to discuss the content.
- 4. Continue with the **Practice It** and practice modeling addition equations with counters.
- 5. Use the Answer Key to check the answers with your student.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice creating addition equations with counters.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. To continue practice, use the pipe cleaner and beads to practice addition.



**Topic** 

### Add and Subtract within 5

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

model subtraction problems within 5

#### **Materials**

- 5 beads
- pipe cleaner
- counters

# **Subtraction with Modeling**



# **Activate**

- 1. Have your student hold the pipe cleaner. Give them five beads to start with and help thread them through the pipe cleaner.
- 2. Ask your student to give you one of the beads from the pipe cleaner.
- 3. Ask your student how many beads they have now.



## **Engage**

- 1. Begin with the **Read It** and read about using counters to model subtraction problems.
- 2. Your student can continue practice by using the beads and the pipe cleaner. Have them model a few different equations and finish with the Self Check.
- 3. Open the **Subtracting Numbers 0 to 3 Watch It** and watch the video with your student. Pause it as necessary to discuss the content.
- 4. Continue with the **Practice It** and practice modeling subtraction equations with counters.
- 5. Use the Answer Key to check your student's answers together.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice creating subtraction equations with counters.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For more practice, continue using the pipe cleaner and beads to practice subtraction.



## **Topic**

#### Add and Subtract within 5

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

solve addition problems within 5

#### **Materials**

- 5 toy cars
- dry erase board and marker

# **Adding within 5 Using Drawings**



# **Activate**

- 1. Explain to your student that they are going to use their imagination to think about a math story. The story takes place in Addition Land.
- 2. Have your student line up 3 toy cars in front of them and pretend that it is Addition Land.
- 3. Tell your student that two more cars are driving to Addition Land and have them drive the two cars to Addition Land. Discuss with your student how many cars are now in Addition Land.



# 1. Begin with the **Read It** and read about using drawings to solve addition problems. Use the dry erase board to draw the problems for your student.

- 2. Finish with the Self Check.
- 3. Feel free to continue modeling the problems with the cars from the Activate section.
- 4. Open the **And the Sum Is Watch It** and watch the video with your student. Pause the video as necessary to discuss the content.
- 5. Continue with the **Practice It** and practice using drawings to solve addition problems.
- 6. Use the Answer Key to check your student's answers.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice drawing to solve addition problems.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. To further your student's learning, have them draw more pictures to add together. Show them that you can change the order of the pictures and still get the same answer.



**Topic** 

#### Add and Subtract within 5

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

solve subtraction problems within 5 using drawings

#### **Materials**

- 5 toy cars
- dry erase board and marker
- index cards

# **Subtraction to 5 with Drawings**



## **Activate**

- 1. Explain to your student that they are going to use their imagination to think about a math story. The story takes place in Subtraction Land.
- 2. Have your student line up 5 toy cars in front of them and to pretend that it is Subtraction Land.
- 3. Tell your student that one car is driving away from Subtraction Land and have them drive the car away. Discuss with your student how many cars are left in Subtraction Land.



# **Engage**

- 1. Continue with the **Read It** and read about using drawings to solve subtraction problems. Use the toy cars from the Activate section to continue practicing. Finish with the Self Check.
- 2. Open the **Three Little Monkeys Watch It** and watch the video with your student, pausing the video as necessary to discuss the content.
- 3. Continue with the **Practice It** and practice using drawings to solve subtraction problems.
- 4. Use the Answer Key to check your student's answers.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice using drawings to solve subtraction problems.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.



**Topic** 

#### Add and Subtract within 5

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

explain how to solve addition problems

#### **Materials**

- 3 plastic eggs
- permanent marker
  - dry erase board and marker

# **Adding with Verbal Explanation**



# **Activate**

- 1. Before starting the lesson, write on the plastic eggs with the permanent marker. On one half of an egg, write a "0" and on the other half write a "1." On the next egg, write a "2" on one half and a "3" on the other half. On the last egg, write a "4" on one half and a "5" on the other half.
- 2. Have your student mix and match the eggs as they please.
- 3. Help your student add the numbers on the top half and the bottom half of one egg together to get a sum. Repeat for the other two eggs.



- 1. Begin with the **Read It** and read about adding using a verbal explanation. Finish with the Self Check.
- 2. Open the **Sets of Buttons Watch It** and watch the video with your student. Pause the video as necessary to discuss the content.
- 3. Continue with the **Practice It** to practice your student's verbal explanation for an addition problem.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice explaining addition problems.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student use the plastic eggs and counters (these could be buttons, jelly beans, or macaroni pieces). Ask your student to put the correct number of counters in the egg shells to represent the numbers on each half of the egg, and then explain how they add the numbers together to get the sum. At that point, have your student combine all of the counters and close the egg to help them visualize the sum.



**Topic** 

### Add and Subtract within 5

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

• explain how to solve subtraction problems

#### **Materials**

- playdough
- dry erase board and marker

# **Subtract with Explanation**



# **Activate**

- 1. Help your student make 5 balls from playdough. Use the balls to set up subtraction problems.
- 2. Begin with the number 5 and practice subtracting numbers from 5.
- 3. When your student is subtracting a number, have them smash the playdough ball to represent that it is being taken away from the original number.



- 1. Begin with the **Read It** and read about subtraction with verbal explanation. Finish with the Self Check.
- 2. Open the **Subtracting Cookies Watch It** and watch the video with your student. Pause the video as necessary to discuss the content.



- 1. Next, move on to the **Show It** and have your student complete the activity to continue practice explaining subtraction problems.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For more practice, use the playdough to model more subtraction problems, and have your student explain the answer.



**Topic** 

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

model addition problems with manipulatives

#### **Materials**

- cup
- playing die
- counters
- dry erase board and marker
- index cards

# **Manipulatives for Addition**



# **Activate**

- 1. Have your student roll the playing die. The number on the die should be the number of counters they place in the cup.
- 2. Take your turn rolling the playing die and place the rolled number of counters in the cup.
- 3. Help your student count the counters in the cup. Repeat for further practice.



## **Engage**

- 1. Begin with the **Read It** and read about using manipulatives to model addition problems. Finish with the Self Check.
- 2. Open the **A List to Organize Watch It** and watch the video with your student. Pause the video as necessary to discuss the content.
- 3. Continue by playing the **Unusual Suspects-Adding Numbers Play It**. Feel free to have your student play the game multiple times or until the content is mastered.



- 1. Move on to the **Show It** and have your student complete the activity to practice modeling addition problems.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student model addition problems using their favorite candy pieces.



**Topic** 

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

model subtraction problems with manipulatives

#### **Materials**

- cup
- playing die
- counters
- dry erase board and marker
- index cards

#### **Subtraction with Counters**



# **Activate**

- 1. Fill the cup with 10 counters.
- 2. Have your student roll the playing die. The number on the die should be the number of counters they remove from the cup.
- 3. Help your student count the counters in the cup. Repeat for further practice.



## Engage

- 1. Begin with the **Read It** and read about using manipulatives to model subtraction problems. Finish with the Self Check.
- 2. Open the Subtracting Cookies Watch It and watch the video with your student. Pause the video as necessary to discuss the content.
- 3. Continue with the **Unusual Suspects-Subtracting Numbers Play It**. Feel free to have your student play the game multiple times or until the content is mastered.



- 1. Move on to the **Show It** and have your student complete the activity to practice modeling subtraction problems.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For more practice, feel free to continue subtracting using the cup, counters, and playing die.



**Topic** 

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- use fingers to solve addition problems within 10
- use fingers to solve subtraction problems within 10

#### **Materials**

10 base ten units

# **Addition Using Fingers**



## **Activate**

- 1. Give your student a number between 1 and 10 and have them stack the given amount of base ten units.
- 2. Ask your student to add and subtract different amounts of units from their stack of base ten units. Practice for a few problems.



- 1. Begin with the **Read It** and read to your student about using your fingers to solve addition problems. Feel free to use the base ten units to reinforce the concept. Finish with the Self Check.
- 2. Continue with the **Unusual Suspects-Adding Play It**. This is a repeated game with challenging content. Your student may use counters to help them solve the problems.



- 1. Move on to the **Show It** and have your student complete the activity to practice using their fingers to solve addition problems.
- 2. Use the **Show It AK** and work with your student to check their answers.

# **Subtraction Using Fingers**



- 1. Continue with the **Read It** and read about using your fingers to solve subtraction problems. Feel free to use the base ten units to reinforce the concept. Finish with the Self Check.
- 2. Continue with the **Unusual Suspects-Subtracting Play It**. Have your student play the game multiple times or until the content is mastered.

- 1. Move on to the **Show It** and have your student complete the activity to practice using their fingers to solve subtraction problems.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.



**Topic** 

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

model addition problems with drawings

#### **Materials**

- playing cards, numbers 1–5
- · dry erase board and marker

# **Addition Using Drawings**



# **Activate**

- 1. Place the playing cards face down in a random arrangement. Have your student turn over two cards.
- 2. Help your student point to each heart, diamond, spade, or club on both cards and count each one aloud.
- 3. Take turns doing this with your student until you are out of cards.



## Engage

- 1. Begin with the **Read It** and read about solving addition problems with drawings.
- 2. Use this opportunity to explain to your student that the drawing can be creative and does not have to be perfect. Finish with the Self Check.



- 1. Move on to the **Show It** and have your student complete the activity to practice solving addition problems with drawings.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, try more playing cards from the deck, numbers 1-10, and practice adding.



**Topic** 

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- use a number line to solve addition problems within 10
- use a number line to solve subtraction problems within 10

#### **Materials**

- dry erase board and marker
- printed number line, 0 10
- figurine

# **Addition Using a Number Line**



# **Activate**

- 1. Lay the number line in front of your student.
- 2. Help your student use the figurine to hop to each number, starting at 0 and going through 10. Say each number with your student as the figurine touches it.



- 1. Begin with the **Read It** and read about using a number line to solve addition problems. Use the figurine to hop on the number line as your student solves the problems. Finish with the Self Check.
- 2. Open the **A Number Line and a Bunny Watch It** and view it together. Pause the video as needed to help your student understand the content.



# **Demonstrate**

- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.

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## **Subtraction Using a Number Line**



- 1. Continue with the **Read It** and read about using a number line to solve subtraction problems.
- 2. Use the figurine to hop on the number line as your student solves the problems. Finish with the Self Check.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice using a number line to solve subtraction problems.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, give your student a few addition and subtraction problems, and have them use the figurine to "hop" from number to number.



#### **Topic**

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

· use a calculator to solve addition problems

#### **Materials**

calculator

### **Addition with a Calculator**



# **Activate**

- 1. Ask your student if they have ever used a calculator before, or have ever seen anyone else use one.
- 2. Next, ask your student to think about why you might want to use a calculator. Allow them to explore it on their own for a few minutes.



- 1. Begin with the **Read It** and read about using a calculator to solve an addition problem. Finish with the Self Check.
- 2. Open **Unusual Suspects Adding Play It** and have your student play the game until they have mastered the content. Have your student use the calculator to find the answers to the problems provided.
- 3. Next, ask your student to practice using the calculator to answer problems given by you.



- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paperclip icon in the upper-left corner of the **Assess It**.
- 3. For more practice, have your student count the number of pencils they have, the markers they have, and then add them together using the calculator.



**Topic** 

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

• use a calculator to solve subtraction problems

#### **Materials**

calculator

#### **Subtraction with a Calculator**



# **Activate**

- 1. Ask your student to try solving the subtraction problem 523 482.
- 2. If your student struggles to solve the problem with their current knowledge, ask them if they can think of a tool to help solve this problem.
- 3. Discuss the use of a calculator, and then show them how to solve the problem for reference.



## **Engage**

- 1. Begin with the **Read It** and read about using a calculator to solve a subtraction problem. Finish with the Self Check.
- 2. Use this opportunity to give your student a few more subtraction problems to solve with the calculator.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice using a calculator to solve subtraction problems.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Finally, have your student count how many lights are on in the room. Ask your student how many lights would be left on if one burned out. Have them use the calculator to solve it.



**Topic** 

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 use a plus sign (+) and an equal sign (=) to write an addition problem

#### **Materials**

- paper plate
- marker
- counters
- playing die

# **Represent Addition**



# **Activate**

- 1. Help your student draw a straight line with the marker to divide the paper plate in half.
- 2. Then, help your student start in the middle of that line (the center of the plate), and draw a perpendicular line that divides one half of the circle in half. The paper plate should be divided into three sections.
- 3. Lay the plate in front of you and your student with the middle line lying horizontally with the two small sections at the top and the single larger section on the bottom. The lines should look like this in front of you: \_\_|\_\_.
- 4. Have your student roll the playing die. Place counters on the first small section of the paper plate to represent the amount rolled on the die.
- 5. Have your student roll the playing die a second time. Place counters on the second small section of the plate to represent the amount rolled on the die.
- 6. In the third and largest section of the plate, help your student count aloud and place counters to represent the total amount of the counters in the two small sections of the plate.



## **Engage**

- 1. Begin with the **Read It** and read about using a plus sign and an equal sign.
- 2. Use this opportunity to explain to your student that they could put a plus sign between the two small sections of the paper plate and an equal sign on the horizontal line. Practice with the activity described in the Activate section to help master the concepts.
- 3. Open the **And the Sum Is Watch It**. View the video, pausing it at times to ask your student what they are thinking. This will help them connect to the content.



- 1. Continue with the **Show It** and have your student complete the activity to practice using plus signs and equal signs.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.



**Topic** 

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 use a minus sign (-) and an equal sign (=) to write a subtraction problem

#### **Materials**

- 10 bowling pins (cardboard tubes)
- ball
- dry erase board and marker

# **Represent Subtraction**



# **Activate**

- 1. Help your student set up the bowling pins in a triangular shape. Place one pin closest to you, two pins behind the first pin, three pins behind the second row, and four pins in the last row.
- 2. Have your student count aloud each pin. After your student counts 10 pins, have your student stand 5 to 10 feet away from the pins and roll the ball toward the pins to knock as many over as they can.
- 3. Help your student count aloud the number of pins they knocked over and how many pins are left.



- 1. Begin with the **Read It** and read about using a minus sign and an equal sign.
- 2. Use this opportunity to explain that knocking over the bowling pins with the ball is a subtraction problem. Feel free to practice more with the bowling pins.
- 3. Write the problems created from the fallen bowling pins on the dry erase board so your student can see the equation. Finish with the Self Check.
- 4. Open the **Three Little Monkeys Watch It** and view it with your student. Take time to pause the video at times and ask your student what they are thinking. This will help them connect to the content.



- 1. Continue with the **Show It** and have your student complete the activity to practice using minus signs and equal signs.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.



#### **Topic**

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- use mental math to solve addition problems within 10
- use mental math to solve subtraction problems within 10

#### **Materials**

- number cards 0–5
- counters
- dry erase board and marker

# **Addition Using Mental Math**



## **Activate**

- 1. Lay out the six number cards in front of your student.
- 2. Instruct your student to place counters that match the amount on the card on each number card. Help your student count aloud for each counter.



- 1. Begin with the **Read It** and read about using mental math to solve addition problems.
- 2. Feel free to use the counters to help your student check their answers. Finish with the Self Check.
- 3. Open the **Unusual Suspects-Adding Play It** and play the game together. Play the game as many times as desired or until the content is mastered.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice using mental math to solve addition problems.
- 2. Use the **Show It AK** and work with your student to check their answers.

# **Subtraction Using Mental Math**



- 1. Continue with the **Read It** and read about using mental math to solve subtraction problems.
- 2. Feel free to use the counters to help your student check their answers. Finish with the Self Check.
- 3. Next, open the **Unusual Suspects-Subtracting Play It** and play the game together. Play the game as many times as desired or until the content is mastered.

- 1. Next, move on to the **Show It** and have your student complete the activity to practice using mental math to solve subtraction problems.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.



**Topic** 

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use sounds to solve addition problems within 10

#### **Materials**

- toy drum or other musical instrument
- dry erase board and marker

# **Addition Using Sounds**



# **Activate**

- 1. Have your student free play on the toy instrument.
- 2. Instruct your student to hit the drum 10 times. Count aloud each time your student hits the drum.
- 3. Try other numbers as you wish.



- 1. Begin with the **Read It** and read about using sounds to solve addition problems.
- 2. Feel free to have your student use a different sound to solve the problems. Finish with the Self Check.



- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, submit the numbers they got correct by scanning the document or taking a photo of it and uploading it to the Dropbox. If your student did not miss any numbers, write "All correct" on your paper and submit it via the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use a verbal explanation to solve addition problems

#### **Materials**

- glue stick
- scissors
- drawing paper
- dry erase board and marker

#### **Verbal Addition**



# **Activate**

- 1. Help your student trace their hands on drawing paper and cut them out.
- 2. Then help your student glue the palms of the hands next to each other onto another piece of paper, leaving the fingers unglued.
- 3. Ask your student to model the answers to a few addition problems with the paper fingers (e.g. 2 + 2; 1 + 3; 4 + 1).
- 4. Save the paper fingers for tomorrow!



# **Engage**

- 1. Begin with the **Read It** and read about using verbal explanation to solve addition problems.
- 2. Feel free to use any method your student has learned to help them check their answers, including the paper fingers made during the Activate section. Finish with the Self Check.
- 3. Next, open the **Adding One-Digit Numbers Watch It** and make note of the username and password provided on the Discovery Education image. Click the link for the video and enter the provided username and password. Watch the video, pausing as needed to help your student understand the content.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice using a verbal explanation to solve addition problems.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, use the fingers from the Activate to solve more addition problems, making sure to have your student verbally explain what they are doing to solve the problem.



**Topic** 

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use a verbal explanation to solve subtraction problems

#### **Materials**

- dry erase board and marker
- glue stick
- scissors
- drawing paper

#### **Verbal Subtraction**



# **Activate**

- 1. Take out the paper fingers your student cut out yesterday. If you do not have them, help your student trace their hands on drawing paper and cut them out. Then, help your student glue the palms of the hands next to each other onto another piece of paper, leaving the fingers unglued.
- 2. Ask your student to model the answers to a few subtraction problems with the paper fingers (e.g. 5 2; 3 1; 4 3).



## **Engage**

- 1. Begin with the **Read It** and read about using verbal explanation to solve subtraction problems.
- 2. Feel free to use any learned method to help your student check their answers, including the fingers made during the Activate section. Finish with the Self Check.
- 3. Next, open the **Subtract One-Digit Numbers Watch It** and make note of the username and password provided on the Discovery Education image. Click the link for the video and enter the provided username and password. Watch the video with your student, pausing it as needed to help your student understand the content.



- 1. Next, move on to the **Show It** and have your student complete the activity to continue practice using verbal explanation to solve subtraction problems.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Finally, use the **Extend It** to expand your student's learning about verbal explanations of subtraction. Finish with the matching activity.



### **Topic**

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- · use phrases to solve addition problems
- use phrases to solve subtraction problems

#### **Materials**

- 10 beads
- pipe cleaner
  - dry erase board and marker

# **Addition Using Phrases**



# **Activate**

- 1. Give your student three addition problems: 5+1, 7+3, and 2+6.
- 2. For each problem, help your student thread the amount of beads given, with one number on one side of the pipe cleaner and the second number on the other side. For example, for 5+1, thread 5 beads toward the left of the pipe cleaner and 1 bead toward to right of the pipe cleaner.
- 3. Have your student count aloud for each bead threaded on the pipe cleaner. Repeat for the other problems.



- 1. Begin with the **Read It** and read about using phrases to solve addition problems.
- 2. Feel free to use the beads and the pipe cleaner to help your student check their answers. Finish with the Self Check.



- 1. Next, move on to the **Show It** and have your student complete the activity to practice using phrases to solve addition problems.
- 2. Use the **Show It AK** and work with your student to check their answers.





#### **Topic**

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

choose the correct sign, plus (+), minus (-), or equal (=), to complete an equation

#### **Materials**

- 4 index cards
- 20 counters

#### **Addition and Subtraction**



# **Activate**

- 1. Draw a plus sign (+) on one index card, a minus sign (-) on the next index card, and an equal sign (=) on the last two index cards.
- 2. "Write" the addition problem "5 + 3 =" using counters and the index cards. Place five counters on the table, the plus sign (+) index card next to it, three more counters, and then the equal sign (=) index
- 3. Help your student solve the problem by counting aloud the counters. Ask your student to show their answer by placing the correct number of counters to the right of the equal (=) sign.
- 4. Now, try the same activity with the subtraction problem "6 2 =." Lay out six counters, the minus sign (-) index card, two counters, and then the equal sign (=) index card.
- 5. Help your student count aloud the amount of counters that would be left from the subtraction problem and place them to the right of the equal sign.



- 1. Begin with the **Read It** and read about representing addition and subtraction with symbols.
- 2. Use this opportunity to use the index cards and counters from the Activate section to create problems for your student to solve. This time, instead of placing the counters on the table, your student will be placing the index cards with the plus (+), minus (-), and equal sign (=) to complete the equations. Place the correct amount of counters in the three spots to represent an addition or subtraction problem, and have your student place the index cards with the appropriate symbols where they belong. Finish with the Self Check.
- 3. Open the **Super Triggle Watch It** and view it with your student. Pause the video at times to ask your student what they are thinking. This will help them connect to the content.



- 1. Open the Assess It, read the instructions, and have your student complete the activity to demonstrate their knowledge.
- 2. When they are finished, submit the document by scanning it or taking a photo of it and uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the Assess It.



# **Topic**

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- explain the steps to solve an addition problem
- use a number sentence and pictures to solve addition word problems

#### **Materials**

- crayons
- paper
- fish crackers

# **Explain Addition**



# Activate

- 1. On a piece of paper, draw a large fishbowl the size of the paper.
- 2. Instruct your student to place three fish crackers in the fishbowl. Now give them four fish crackers to add to the fishbowl.
- 3. Help your student count the total number of fish crackers in the fishbowl.
- 4. Repeat with other addition problems.



### **Engage**

- 1. Begin with the **Read It** and read about explaining the steps to solve addition problems.
- 2. Feel free to use the fishbowl and fish crackers to practice or to check your student's answers. Finish with the Self Check.
- 3. Next, open the **Let's Add Some More Watch It** and view it with your student. Pause the video at times to ask your student what they are thinking. This will help them connect to the content.
- 4. Then, open the **Two Plus Zero through Five Watch It**. As you watch, pause the video as necessary to discuss the content.



### **Demonstrate**

- 1. Move on to the **Show It** and help your student complete the activity to explain the steps needed to solve the addition problem.
- 2. Use the **Show It AK** and work with your student to check their answers.

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#### **Addition Word Problems**



- 1. Continue with the **Read It** and read about using a number sentence and pictures to solve addition word problems.
- 2. Feel free to use the fishbowl and fish crackers to continue practicing or to check your student's answers. Finish with the Self Check.



- 1. Move on to the **Show It** and help your student complete the activity to solve the addition word problems.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.



#### **Topic**

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

· explain the steps to solve a subtraction problem

#### **Materials**

none required

# **Explain Subtraction**



### **Activate**

- 1. On a piece of paper, write these three equations: 4 + 3 = 10, 4 2 = 6, and 5 + 1 = 7.
- 2. Ask your student if the equations are correct. If they say no, see if your student can work to correct them.



- 1. Begin with the **Read It** and read about explaining the steps to solve subtraction problems.
- 2. Use this opportunity to refer back to the equation 4 2 = 6 from the Activate section. Have your student explain the correct answer. Finish with the Self Check.
- 3. Next, open the **One One = No Math Teacher Watch It** and view the video with your student. Pause the video at times and ask your student what they are thinking. This will help them connect to the content.
- 4. Then, open the **How Much Is that Doggie? Watch It**. As you view the video, feel free to pause the video as necessary to discuss the content.



- 1. Move on to the **Show It** and help your student complete the activity to explain the steps needed to solve the subtraction problem.
- 2. Finally, use the **Show It AK** to view the sample answer.





#### **Topic**

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- use a number sentence and pictures to solve subtraction word problems
- determine the reasonableness of an answer of an addition or subtraction problem

#### **Materials**

- crayons
- paper

#### **Subtraction Word Problems**



### **Activate**

- 1. On a piece of paper, write these three equations: 10 3 = 7, 6 2 = 6, and 8 1 = 7.
- 2. Ask your student if the equations are correct. If they say no, see if your student can work to correct them.



- 1. Begin with the **Read It** and read about using a number sentence and pictures to solve subtraction word problems.
- 2. Use this opportunity to help your student think of their own subtraction word problem to solve. If your student is having trouble coming up with an idea for a word problem, suggest imagining places they like to go regularly, such a the park, playground, or grocery store, then help them to come up with a word problem in that setting. For example: "At the playground, there is a swing set with six swings. When Jonathan arrived at the playground, two of his friends were on the swings. How many swings are free?" Finish with the Self Check.



### **Demonstrate**

- 1. Move on to the **Show It** and help your student complete the activity to solve the subtraction word problems.
- 2. Use the **Show It AK** to work with your student to check their answers.
- 3. For extra practice, have your student check their answers using another method such as the number line.

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#### **Examine Calculations**



- 1. Continue with the **Read It** and read about determining the reasonableness of an addition or subtraction problem.
- 2. Use this opportunity to quiz your student on unreasonable answers to word problems by coming up with your own problems that relate to your student. Then, have your student correct them. For example, "After trick-or-treating on Halloween, Mike has eight lollipops. He gives one lollipop to his sister, and two lollipops to his friend James. He is left with eleven lollipops. Is this reasonable?" Personalizing the scenarios to your student will make this activity more fun! Finish with the Self Check.



- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, submit the document by scanning it or taking a photo of it and uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



#### **Topic**

#### **Addition and Subtraction**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- correct an addition problem
- · correct a subtraction problem

#### **Materials**

- number line
- counters

#### **Correct an Addition Problem**



### **Activate**

- 1. Ask your student if they have ever made a mistake while solving a math problem. If they cannot think of a time, have them think of a time when they made another mistake.
- 2. Next, ask your student to explain how they went about correcting their mistake and discuss.



- 1. Begin with the **Read It** and read about correcting an addition problem. Finish with the Self Check.
- 2. Next, ask your student to write down the following problem: 7 + 2 = 10.
- 3. Ask your student to correct the addition problem, using one of the methods they have learned about in this lesson.



# **Demonstrate**

- 1. Move on to the **Show It** and follow the directions to complete the activity to practice correcting addition problems.
- 2. Use the **Show It AK** and work with your student to check their answers.

# **Correct a Subtraction Problem**



- 1. Continue with the **Read It** and read about correcting a subtraction problem. Finish with the Self Check.
- 2. Next, ask your student to write down the following problem: 8 3 = 6.
- 3. Ask your student to correct the subtraction problem, using one of the methods they have learned about in this lesson.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice correcting subtraction problems.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student pretend to be the teacher. Tell your student to give you addition equations to solve, but as you solve them, solve some of them incorrectly. Have your student check your work and correct any problems that you solved incorrectly.



# Topic

#### **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- use drawings to solve addition problems within 10
- use drawings to solve subtraction problems within 10

#### **Materials**

- dominoes
- dry erase board and marker

# **Addition within 10 Drawing**



# **Activate**

- 1. Place the dominoes face down in front of you and your student.
- 2. Each of you turn over one domino. Add together the dots to determine the value of each domino. The person who has the larger number collects both dominoes.
- 3. Repeat until there are no tiles left. Count the dominoes you each collected to see who wins!



# **Engage**

- 1. Begin with the **Read It** and read about using drawings to solve addition problems.
- 2. Feel free to use the dominoes to practice counting the dots to find the sum of each tile. Finish with the Self Check.
- 3. Then open the **Adding with Pictures Watch It** and watch the video with your student. Pause the video at times and ask your student what they are thinking. This will help them connect to the content.



### **Demonstrate**

- 1. Move on to the **Show It** and help your student complete the activity using drawings to solve addition problems.
- 2. Use the **Show It AK** and work with your student to check their answers.

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# **Subtraction within 10 Drawing**



- 1. Continue with the **Read It** and read about using drawings to solve subtraction problems.
- 2. Feel free to use the dominoes to practice subtraction by subtracting the lesser side of each domino from the greater side of each domino. Finish with the Self Check.
- 3. Open the **Stargazing Watch It** and watch the video with your student. Pause the video as necessary to discuss the content.



- 1. Move on to the **Show It** and help your student complete the activity using drawings to solve subtraction problems.
- 2. Use the **Show It AK** and work with your student to check their answers.



#### **Topic**

#### **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- use manipulatives to solve addition problems within 10
- use manipulatives to solve subtraction problems within 10

#### **Materials**

- cup
- jelly beans
- 2 playing die
- dry erase board and marker
- counters

# **Add within 10 Manipulatives**



### **Activate**

- 1. Have your student roll both playing dice. Help your student count aloud the sum of the faces that landed up.
- 2. Have your student count out the sum in jelly beans and place them in the cup.
- 3. Repeat a few more times.



### **Engage**

- 1. Begin with the **Read It** and read about using manipulatives to solve addition problems.
- 2. Feel free to use the jelly beans to practice more problems. Finish with the Self Check.
- 3. Next, open the **Two Plus Zero through Five Watch It** and view the video with your student. Pause the video at times and ask your student what they are thinking. This will help them connect to the content.
- 4. Then, open the **Unusual Suspects-Adding Play It** and guide your student through the game. Take note if your student is finding this game easier to play now that they are further along in the course.



# **Demonstrate**

- 1. Move on to the **Show It** and help your student complete the activity using manipulatives to solve addition problems.
- 2. Use the **Show It AK** and work with your student to check their answers.

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# **Subtract in 10 Manipulatives**



### **Engage**

- 1. Continue with the **Read It** and read about using manipulatives to solve subtraction problems.
- 2. Use the jelly beans to do a few practice problems. Finish with the Self Check.
- 3. Open the **Unusual Suspects-Subtracting Play It** and guide your student through the game. Play the game multiple times or until the content is mastered.



- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, submit the document by scanning it or taking a photo and uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



#### **Topic**

#### **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- use drawings to solve addition word problems
- use drawings to solve subtraction word problems

#### **Materials**

- base ten blocks or building blocks
- playing die
- dry erase board and marker

### **Addition with Drawing**



### **Activate**

- 1. Have your student roll the playing die. Then, have your student build a block tower with the number of blocks that match the number on the playing die.
- 2. Roll the playing die and make your own block tower with the number you rolled.
- 3. Repeat this for 10 turns each. Whoever has the larger block tower at the end of 10 turns wins the game!



# **Engage**

- 1. Begin with the **Read It** and read to your student about using drawings to solve addition word problems.
- 2. Use this opportunity to relate the drawings to the blocks from the Activate section. Finish with the Self Check.
- 3. Open the **Adding Problems with Pictures Watch It** and watch the video with your student. Pause the video as needed to discuss the content. Feel free to use the dry erase board with your student to repeat the word problems shown.



# <u>Demonstrate</u>

- 1. Move on to the **Show It** and help your student complete the activity using drawings to solve addition word problems.
- 2. Use the **Show It AK** and work with your student to check their answers.



# **Drawing Subtraction**



- 1. Continue with the **Read It** and read about using drawings to solve subtraction word problems.
- 2. Try subtraction word problems with the blocks by starting with a block tower and subtracting the number rolled on the playing die. Finish with the Self Check.
- 3. Open the **Subtract Word Problems to 13 Watch It** and watch the video with your student. Pause the video as needed to discuss the content. Use the dry erase board with your student to complete the word problems with Mrs. Triggle.

- 1. Use the **Show It** and help your student complete the activity using drawings to solve subtraction word problems.
- 2. Use the **Show It AK** and work with your student to check their answers.



**Topic** 

### **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use manipulatives to solve addition word problems

#### **Materials**

- counters
- cup
- dry erase board and marker

# **Addition Using Manipulatives**



# **Activate**

- 1. Place four counters in a cup.
- 2. Have your student shake the cup and pour the counters on the surface in front of them.
- 3. Ask your student to line up the counters and count each one aloud as they place them.



- 1. Begin with the **Read It** and read to your student about using manipulatives to solve addition word problems.
- 2. Create your own word problem for your student to use the counters or other objects to solve. Finish with the Self Check.



- 1. Move on to the **Show It** and help your student complete the activity using counters to solve addition word problems.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, come up with addition and subtraction word problems using your student's toys, clothes, and other belongings to practice.



**Topic** 

# **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use manipulatives to solve subtraction word problems

#### **Materials**

- counters
- cup
- dry erase board and marker

# **Subtraction Using Manipulatives**



# **Activate**

- 1. Place 10 counters in a cup.
- 2. Have your student shake the cup and pour the counters on the surface in front of them.
- 3. Ask your student to line up the counters and count each one aloud as they place them.



- 1. Begin with the **Read It** and read to your student about using manipulatives to solve subtraction word problems. Finish with the Self Check.
- 2. Next, open the **How Many More? Watch It** and watch the video with your student. Emphasize that the question "How many more?" means that the student will need to subtract. Pause the video as needed to work the problems or to discuss the content with your student.
- 3. Create your own subtraction word problem for your student to use the counters or other objects to solve.



- 1. Move on to the **Show It** and help your student complete the activity using counters to solve subtraction word problems.
- 2. Use the **Show It AK** and work with your student to check their answers.





#### **Topic**

#### **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- choose appropriate tool to solve an addition word problem
- choose appropriate tool to solve a subtraction word problem

#### **Materials**

- number line
- counters
- base ten blocks
- hundreds chart

# **Choosing Tools to Add**



# **Activate**

- 1. Ask your student to solve the following addition problem: Jen has seven books. Her sister gives her three more books. How many books does Jen have all together?
- 2. Discuss how they solved the problem and check the answer together.



### Engage

- 1. Begin with the **Read It** and read about choosing the right tool to solve an addition problem. Finish with the Self Check.
- 2. Next, open A Number Line and a Bunny Watch It and watch the video with your student. Pause the video as necessary to allow your student time to solve each problem.
- 3. For extra practice, ask your student to pick the best tool, and to solve the following addition word problem: Katie picks five tulips for her mom. Then she picks four roses. How many flowers does Katie have total, to give to her mom? (Answer: counters or number line, and 5 + 4 = 9 flowers).



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice choosing a tool to solve an addition problem.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, ask your student to imagine they are having a party. You have invited three friends already, but you want to invite five more. How many friends are you inviting all together? Have your student solve the problem and check the answer together.

# **Choosing Tools to Subtract**



- 1. Continue with the **Read It** and read about choosing the right tool to solve a subtraction word problem. Finish with the Self Check.
- 2. Next, open **A List to Organize Watch It** and watch the video with your student. Pause the video as necessary, to allow your student time to solve each problem.
- 3. Finally, ask your student to pick the best tool, and to solve the following subtraction word problem: Charlie was carrying six eggs. Then he dropped two of them. How many eggs does Charlie have left? (Answer: counters or number line, and 6 2 = 4 eggs).



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice choosing a tool to solve a subtraction word problem.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, ask your student to imagine they have six friends over for a playdate. Three friends have to leave. How many friends are still at the playdate? Have your student solve the problem and check the answer together.



**Topic** 

#### **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use underlining as a strategy to solve addition word problems

#### **Materials**

- base ten blocks
- "Underlining with Addition" activity page
- counters
- hundreds chart
- number line

# **Underlining in Addition**



# **Activate**

- 1. Ask your student to set up an addition problem, using the base ten blocks. (Example: if you were adding 3 + 4, you would have a group of 3 units, and a group of 4 units)
- 2. Next, help your student to make up a story, to go with the addition problem they just created. (Example: John has 3 apples, and Sarah has 4 apples. How many apples do they have all together?)



### **Engage**

- 1. Begin with the **Read It** and read about underlining important information in addition word problems.
- 2. A suggestion would be to allow your student to underline this information on the printed version of the text. Finish with the self check.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice underlining in addition word problems.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, write down a few addition word problems for your student to solve by underlining important information.



**Topic** 

#### **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use underlining as a strategy to solve subtraction word problems

#### **Materials**

- base ten blocks
- "Underlining with Subtraction" activity page

# **Underlining in Subtraction**



### **Activate**

- 1. Ask your student to set up and solve a subtraction problem, using the base ten blocks. (Example: if you were adding 9 4, you would have a group of 9 cubes, and then take away 4 cubes).
- 2. Next, ask your student to make up a story to go with the subtraction problem they just created. (Example: John had 9 pieces of pie, and gave 4 pieces away to his friends. How many pieces of pie does John have left?)



- 1. Begin with the **Read It** and read about underlining in subtraction word problems.
- 2. A suggestion would be to allow your student to underline this information on the printed version of the text. Finish with the Self Check.



- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.
- 3. For extra practice, write down a few subtraction word problems for your student to solve by underlining important information.



**Topic** 

### **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

draw a picture to solve a word problem

#### **Materials**

dry erase board and marker

#### **Draw a Word Problem**



# **Activate**

- 1. Ask your student to solve the following problems: 8 + 2 and 7 3.
- 2. Allow your student to use a method of their choice to solve the problems. Check the answers together.



### <u>Engage</u>

- 1. Begin with the **Read It** and read about drawing pictures to solve word problems. Finish with the Self Check.
- 2. Next, open the **Math Solves Everything Watch It** and watch the video with your student. Pause the video as necessary to allow your student time to solve each problem.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice drawing a picture to solve word problems.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. To continue practicing, ask your student to draw the solution to a word problem based on your surroundings.



### **Topic**

### **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

write an addition equation to solve a word problem

#### **Materials**

dry erase board and marker

# **Addition Equations**



# **Activate**

1. Write the following equations on the dry erase board:

$$6+2=$$
  $3+7=$   $4+1=$   $5+4=$   $6+3=$ 

2. Set a timer and see how quickly your student can solve all five equations correctly.



# **Engage**

- 1. Begin with the **Read It** and read about writing an equation to solve a word problem.
- 2. Use this opportunity to create a problem using laundry, and have your student solve it with the dry erase board and marker. Finish with the Self Check.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice writing addition equations to solve word problems.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. The next time you go to the store, create a word problem for the food you are buying, and have your student solve it.



### **Topic**

### **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

write a subtraction equation to solve a word problem

#### **Materials**

dry erase board and marker

# **Subtraction Equations**



### **Activate**

1. Write the following equations on the dry erase board:

$$9-3=3-3=8-6=5-2=6-1=$$

2. Set a timer and see how quickly your student can solve all five equations correctly.



# **Engage**

- 1. Begin with the **Read It** and read about writing a subtraction problem to solve a word problem. Finish with the Self Check.
- 2. Next, open the **Subtracting Mysteries Watch It** and watch the video with your student. Pause the video as necessary to allow your student time to solve each problem.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice writing subtraction equations to solve subtraction word problems.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. As a review, the next time you and your student share something (toys, books, food, etc.) write an equation to show how many you have left.



**Topic** 

# **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

say a word problem to match an addition equation

#### **Materials**

none required

#### **Dictate Addition Problems**



### **Activate**

- 1. Say the following problem to your student: 5 + 3. Ask your student to solve the problem with a method of their choice.
- 2. Continue this with the following problems: 2 + 3, 6 + 4, 9 + 1, and 2 + 7.



- 1. Begin with the **Read It** and read about saying a word problem to match an addition problem.
- 2. Emphasize what the word "dictate" means. Feel free to use crackers, cupcakes, or other objects to bring the word problems to life. Finish with the Self Check.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice saying a word problem.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student make up their own addition word problem for you to solve. Work through the answer together.



**Topic** 

# **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

say a word problem to match a subtraction equation

#### **Materials**

dry erase board and marker

#### **Dictate Subtraction Problems**



### **Activate**

- 1. Say the following problem to your student: 5 3. Ask your student to solve the problem with a method of their choice.
- 2. Continue this with the following problems: 3 2, 6 4, 9 1, and 7 5.



- 1. Begin with the **Read It** and read about saying a word problem to match a subtraction problem.
- 2. Emphasize the meaning of the word "dictate." Feel free to use toy cars or jelly beans to make the problems come to life. Finish with the Self Check.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice saying a word problem.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student make up their own subtraction word problem for you to solve. Work through the answer together.



**Topic** 

# **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

· use crayons to solve a word problem

#### **Materials**

crayons

# **Word Problems with Crayons**



# **Activate**

- 1. Hand your student five crayons. Ask your student to give you two crayons back.
- 2. Ask your student how many crayons they have left in their hands.



# <u>Engage</u>

- 1. Begin with the **Read It** and read about using crayons to solve word problems.
- 2. Use household items to make the problem more hands on for your student.
- 3. Discuss with your student that they can use whatever they have handy to solve math problems if they need to.
- 4. Finish with the Self Check.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice using crayons to solve a word problem.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, help your student come up with their own word problem to solve based on their surroundings. Work together to solve the problem.



**Topic** 

# **Add and Subtract Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use the commutative property when solving an addition word problem

#### **Materials**

- building blocks, 2 colors
- counters
- Unifix® cubes

# **Commutative Property to Add**



### **Activate**

- 1. Help your student arrange a tower of building blocks for the addition problem 5 + 3. Use one color for the 5 and the other color for the 3.
- 2. Help your student arrange a tower of building blocks for the addition problem 3 + 5. Use one color for the 3 and the other color for the 5.



# **Engage**

- 1. Begin with the **Read It** and read to your student about the commutative property.
- 2. A suggestion would be to give your student additional problems to use the commutative property, and have them use the Unifix® cubes to see the problems visually. Finish with the Self Check.



- 1. Move on to the **Show It** and follow the directions to complete the activity to use counters to demonstrate the commutative property.
- 2. Use the **Show It AK** and work with your student to check their answer.



**Topic** 

#### **Solve Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

analyze word problems to solve

#### **Materials**

10 pretzels

# **Analyze Word Problems**



### **Activate**

- 1. Give your student ten pretzels. Ask them to give you two of the pretzels back.
- 2. Ask your student how many pretzels they have left and have them count each pretzel aloud.
- 3. Have your student tell you if that was a subtraction problem or an addition problem.



- 1. Begin with the **Read It** and read to your student about how to find the important information in word problems. Finish with the Self Check.
- 2. Next, open the **Adding and Subtracting up to 5 Watch It** and view the video with your student. Emphasize that the question "How many are left?" signals a subtraction problem and that the question "How many in all?" signals an addition problem. Pause the video as needed to work through the problems or to discuss the content with your student.



- 1. Move on to the **Show It** and help your student complete the activity to identify the important information and solve the word problems.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, create your own word problem, then have your student identify the important information and solve. Check the answer together.



**Topic** 

#### **Solve Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

make a plan to solve a word problem

#### **Materials**

none required

#### **Word Problem Plan**



### **Activate**

- 1. Ask your student to think about their favorite sandwich.
- 2. Discuss a plan with your student to make that sandwich. Ask them what they think they need in order to make it. Be sure to add important details that your student may leave out, such as getting out a knife.



- 1. Begin with the **Read It** and read to your student about how to make a plan to solve word problems. Finish with the Self Check.
- 2. Next, open the **Word Problem:** + and 18 Watch It and view the video with your student. Emphasize that the words "in all" mean addition and "how many are left" mean subtraction. Pause the video as needed to work through the problems or to discuss the content with your student.
- 3. Use this opportunity to create your own word problem for your student. Help them make a plan and solve.



- 1. Move on to the **Show It** and help your student complete the activity to make a plan and solve the word problems.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, continue to randomly ask your student how they would solve a problem they encounter during their day, reminding them to outline their plan step by step.



**Topic** 

#### **Solve Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

explain whether an addition problem makes sense

#### **Materials**

counters

# **Making Sense of Addition**



### **Activate**

- 1. Ask your student to write out three addition equations (e.g. 3 + 2 = 5).
- 2. Help your student arrange and count out counters to represent the addition equations that they came up with.



- 1. Begin with the **Read It** and read to your student about how to explain if an addition problem makes sense. Finish with the Self Check.
- 2. Now, open the **Adding Flamingos Watch It** and make note of the username and password provided on the Discovery Education image. Click the link for the video and enter the provided username and password. Watch the video with your student. Pause the video as needed to work the problems and to help your student understand the content.
- 3. Create your own addition equation that does not make sense and help your student work through the problem with counters.



- 1. Move on to the **Show It** and help your student complete the activity to determine if the problems make sense.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Finally, use the **Reinforce It** to review the concept of making sense of addition problems. Complete the activity using counters.



# Topic

#### **Solve Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

check answers to addition problems

#### **Materials**

- dry erase board and marker
- number line

#### **Addition Check**



### **Activate**

- 1. Write the addition equation "4 + 3 =" and the subtraction equation "7 4 =" on the dry erase board.
- 2. Have your student solve the two equations and ask them if they notice anything about the two equations.



- 1. Begin with the **Read It** and read to your student about how to check an addition problem answer with a different method. Finish with the Self Check.
- 2. Now, open The **Opposite of Addition Watch It** and watch the video with your student. Emphasize that addition and subtraction are opposites. Pause the video as needed for your student to work through the problems or to discuss the content.
- 3. Open the **Unusual Suspects-Adding Numbers Play It** and help your student play the game. Feel free to have your student play the game multiple times or until the content is mastered.
- 4. Discuss with your student that the problems from the Activate activity were a way to check answers.



- 1. Open the **Assess It** and have your student complete the activity to demonstrate their understanding.
- 2. When they are finished, write the method your student used to check the answer.
- 3. Submit the document by scanning it or taking a photo of it and uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

#### **Solve Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

check answers to subtraction problems

#### **Materials**

- dry erase board and marker
- number line

# **Subtraction Check**



# **Activate**

- 1. Write the addition equation "6 + 3 =" and the subtraction equation "9 6 =" on the dry erase board.
- 2. Have your student solve the two equations and ask them if they notice anything about the two equations.



- 1. Begin with the **Read It** and read to your student about how to check the answer to a subtraction problem with different methods. Finish with the Self Check.
- 2. Now, open the **Subtracting Penguins Watch It** and and make note of the username and password provided on the Discovery Education image. Click the link for the video and enter the provided username and password. Watch the video with your student, pausing the video as needed so your student can work through the problems or discuss the content. Remind your student that they can use the number line to help them.
- 3. Open the **Unusual Suspects-Subtracting Numbers Play It** and help your student play the game. Feel free to have your student play the game multiple times or until the content is mastered.



### **Demonstrate**

- 1. Move on to the **Show It** and help your student complete the activity to check the answers to the subtraction problems.
- 2. Finally, use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student check answers to other subtraction problems and to write all of the equations associated with three numbers, for example:

1+2=3 2+1=3 3-1=2 3-2=1



**Topic** 

#### **Solve Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

solve an addition problem with an "unknown partner"

#### **Materials**

- dry erase board and marker
- number line
- base ten units

### **Unknown Partners**



# **Activate**

- 1. Ask your student to solve the problem "1 + 1 =". Affirm their correct answer of "2".
- 2. Write "1 + 1 = 3" on the dry erase board. Ask your student if that equation is correct.
- 3. Talk about the fact that the equation is not correct, and ask your student if they know how they could change the problem to make it correct. Most students will say "1 + 1 = 2," however, some may say "1 + 2 = 3," or "2 + 1 = 3." Accept any correct answer.



### **Engage**

- 1. Begin with the **Read It** and read to your student about how to check for an unknown partner in an equation.
- 2. Have your student practice their own problems on the dry erase board. Finish with the Self Check.



- 1. Move on to the **Show It** and help your student complete the activity to check the unknown partner in the addition problems.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Move on to the **Extend It** and read to your student about unknown partners.
- 4. Finish with the activity challenging your student find the unknown partners. Go back to the problem in the Activate section, and explain the other ways to correct the given equation.



**Topic** 

#### **Solve Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

explain how to check an addition word problem

#### **Materials**

- number line
- counters

# **Accuracy of Addition Problem**



### **Activate**

- 1. Write the following addition equations: 5 + 2 = 7, 3 + 6 = 10, and 7 + 2 = 9.
- 2. Ask your student to check the answers to these problems. If any are incorrect, help your student correct their mistake, and arrive at the correct answer.



- 1. Begin with the **Read It** and read about checking an addition problem. Finish with the Self Check.
- 2. Next, open **The Opposite of Addition Watch It** and watch the video with your student. Pause the video as necessary, to allow your student time to solve each problem.
- 3. Ask your student to think of two addition equations. Have your student solve the equations and check the addition using one of the methods they have learned about.



### **Demonstrate**

- Move on to the **Show It** and follow the directions to complete the activity to practice checking the accuracy of addition problems.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, solve the word problem below incorrectly, and ask your student to check your answer and explain their thinking. Have your student correct your answer.

Joe has 3 pencils. Joe's teacher gives him 3 more pencils. How many pencils does Joe have in all?



**Topic** 

#### **Solve Word Problems**

#### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

explain how to check a subtraction word problem

#### **Materials**

- number line
- counters

# **Accuracy: Subtraction Problem**



# **Activate**

- 1. Write the following subtraction equations: 5 2 = 3, 7 4 = 4, and 8 4 = 4.
- 2. Ask your student to check the answers to these problems. If any are incorrect, help your student correct the mistake and arrive at the correct answer.



- 1. Begin with the **Read It** and read about checking a subtraction problem.
- 2. A suggestion would be to use all methods learned to check the problem to practice the methods. Finish with the Self Check.



### **Demonstrate**

- 1. Move on to the **Show It** and follow the directions to complete the activity to practice checking answers of subtraction problems.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, solve the word problem below incorrectly, and ask your student to check your answer and explain their thinking. Have your student correct your answer.

Greg has 10 puzzles. He builds 7 puzzles. How many more puzzles does Greg have to build?



**Topic** 

### **Solve Word Problems**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use a shortcut method to solve a repeated calculation word problem

#### **Materials**

- pipe cleaner
- 6 beads, 3 different colors

### **Shortcut Method**



### **Activate**

- 1. Give your student the pipe cleaner and the beads.
- 2. Help your student thread the beads through the pipe cleaner in a pattern.
- 3. Count aloud while pointing to each bead.



- 1. Begin with the **Read It** and read to your student about using a shortcut method to solve a word problem with repeated calculations.
- 2. Help your student create their own word problem with a repeated calculation. Use objects to help solve the problem if needed. Finish with the Self Check.
- 3. Open the **Number Patterns Watch It** and view the video together with your student. Pause the video as necessary to discuss the content. Emphasize that a repeated calculation is the same as a pattern.



- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, submit the document by scanning it or taking a photo of it and uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

## **Decomposing Numbers**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

break apart numbers up to ten using manipulatives

#### **Materials**

- small jigsaw puzzle
- dry erase board and marker
  - counters

## **Decomposing Using Manipulatives**



## **Activate**

- 1. Help your student put together a small jigsaw puzzle.
- 2. When they are finished, break apart the puzzle and count each piece aloud with your student.



## **Engage**

- 1. Begin with the **Read It** and read to your student about how to break apart numbers using manipulatives.
- 2. Use the counters to break apart a few numbers of your choice. Finish with the Self Check.
- 3. Use the **Practice It** to continue breaking apart numbers with the counters.
- 4. Help your student check their answers when finished. If they missed any, help them correct their answer.



- 1. Move on to the **Show It** and help your student complete the activity to practice breaking apart numbers to ten.
- 2. Use the **Show It AK** and work with your student to check their answers.



**Topic** 

## **Decomposing Numbers**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

break apart numbers up to ten using drawings

#### **Materials**

- 10 sticky notes, 2 different colors of 5 notes each
- dry erase board and marker

## **Decomposing Using Drawings**



## **Activate**

- 1. Lay out 5 sticky notes of the same color in a row in front of your student.
- 2. Give your student 3 more sticky notes of the other color and have them place them at the end of the row, following the first set of notes.
- 3. Have your student count aloud each sticky note to determine the sum of the two colors.



### **Engage**

- 1. Begin with the **Read It** and read to your student about how to break apart numbers using drawings.
- 2. Use the dry erase board along with the lesson to break apart other numbers of your choice. Finish with the Self Check.
- 3. If needed, use the sticky notes to practice breaking apart numbers.
- 4. Use the **Practice It** to continue breaking apart numbers with drawings.
- 5. Help your student check their answers when they are finished. If they missed any, help them correct their answer.



- 1. Move on to the **Show It** and help your student complete the activity to practice breaking apart numbers to ten.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Use sidewalk chalk outside to have your student draw as many ways as they can think of to break apart the number 10. They can practice decomposing the numbers two through nine if they need additional practice. If the weather does not allow for outside activities, have your student complete this exercise using the dry erase board and marker.



**Topic** 

### **Decomposing Numbers**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

draw pictures to represent decomposed numbers

#### **Materials**

- building blocks
- dry erase board and marker

## **Decomposing Pictures**



## **Activate**

- 1. Help your student build a tower of 10 building blocks. Count aloud each block with your student to 10.
- 2. Ask your student to choose a way to break the number 10 apart and then to do so using the blocks.
- 3. Count aloud the blocks in each group.



- 1. Begin with the **Read It** and read to your student about how to draw pictures to represent decomposed numbers.
- 2. Use the dry erase board along with the lesson to draw pictures for other decomposed numbers of your choice. Finish with the Self Check.
- 3. Next, use the **Practice It** to continue drawing pictures to represent decomposed numbers.
- 4. Help your student check their answers as they complete the activity. If they missed any, work with them to correct their answer.



- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, submit the document by scanning it or taking a photo of it and uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

### **Decomposing Numbers**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 write an expression from a drawing of a decomposed number

#### **Materials**

· page of stickers

## **Pictures to Decompose**



## **Activate**

- 1. Give your student five stickers to place in a row on a piece of paper.
- 2. Tell your student that they get one more sticker because of their hard work.
- 3. Ask your student to write an addition problem for the stickers.



- 1. Begin with the **Read It** and read to your student about how to write an expression based on a picture. Emphasize that an expression is a math problem.
- 2. Use the stickers to practice writing expressions, if needed. Finish with the Self Check.



- 1. Move on to the **Show It** and help your student complete the activity to write expressions based on the given pictures.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student write an expression for how many windows there are in two different rooms.



### **Topic**

## **Finding an Addend**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use objects to solve for a missing number

#### **Materials**

- 10 pieces of a favorite snack
- pennies
- counters

## **Solve for a Number with Objects**



## **Activate**

- 1. Lay out 10 pieces of a favorite snack in front of your student.
- 2. Take one of the pieces, and tell your student they are now missing one piece. Ask, "How many pieces do you have left?"
- 3. Help your student count each piece aloud to 9.



### **Engage**

- Begin with the **Read It** and read to your student about how to use objects to solve for a missing number.
- 2. Use the snack pieces to help find missing numbers. Finish with the Self Check.
- 3. Next, open the **Baking Up Ten Watch It** and watch it with your student. Pause the video as needed to allow time for your student to work through the problems or to discuss the content.
- 4. Continue with the **Practice It** and help your student work through the problems with the counters. If your student misses a problem, help them to solve the problem correctly.



- 1. Move on to the **Show It** and help your student complete the activity to solve for the missing number.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. This is a good time to give your student a few more problems to practice counting up. You may want to use household items, toys, or money to make the problems more hands-on. Give your student a starting amount, then tell them the number they want to get to. Ask them how many more they will need to add, in order to reach the desired amount. Your student should count up from the starting amount.



**Topic** 

## **Finding an Addend**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use drawings to solve for a missing number

#### **Materials**

dry erase board and marker

## **Solve for a Number Using Drawings**



## **Activate**

- 1. On a piece of paper write "1, 2, 3, \_\_\_, 5" for your student to look at.
- 2. Ask your student to fill in the missing number. Explain to your student that you are going to learn another way to find missing numbers in math problems.



- 1. Begin with the **Read It** and read to your student about how to use drawings to solve for a missing number. Finish with the Self Check.
- 2. Open the **Fact Families of Ten Watch It** and view it with your student. Pause the video as needed to allow time for your student to work through the problems or to discuss the content.
- 3. Continue with the **Practice It** and help your student work through the problem. If your student misses the problem, help them to solve it correctly.



- 1. Move on to the **Show It** and help your student complete the activity to solve for the missing number.
- 2. Use the **Show It AK** and work with your student to check their answers.



## **Topic**

## **Finding an Addend**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

match an equation to a picture

#### **Materials**

- 10 index cards
- "Match Expressions to Pictures" activity page

## **Match Expressions to Pictures**



## Activate

1. Prepare the ten index cards by writing each of the following on a card:

2. Place the ten index cards face down and play a game of memory matching with your student. To make a match, the player should turn over an addition expression and its sum.



## Engage

- 1. Begin with the **Read It** and read to your student about how to match expressions to pictures. Finish with the Self Check.
- 2. Next, open the Adding at the Zoo Watch It and make note of the username and password provided on the Discovery Education image. Click the link for the video and enter the provided username and password. Watch the video with your student, pausing it as needed to help your student understand the content.



- 1. Move on to the **Show It** and help your student complete the "Match Expressions to Pictures" activity page.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Finally, use the **Extend It** to learn more about finding missing addends. Finish with the activity at the end.
- 4. For additional practice, have your student draw pictures on the index cards to match the equations from the activate. They could then play the memory game again.



**Topic** 

## **Finding an Addend**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

draw a picture to represent numbers of equations

#### **Materials**

- dry erase board and marker
- "Drawing a Representation" activity page

## **Drawing a Representation**



## **Activate**

- 1. On the dry erase board, draw a picture of one stick figure.
- 2. Ask your student to draw four more stick figures.
- 3. Help your student count each stick figure aloud to five.



- 1. Begin with the **Read It** and read to your student about how to draw pictures to represent numbers. Finish with the Self Check.
- 2. Next, open the **A Few Facts of Ten Watch It** and view the video with your student. Pause the video as needed to allow time for your student to work through the problems or to discuss the content.
- 3. Continue with the **Practice It** and work through the problem with your student. If they miss the problem, help them solve it correctly.



- 1. Open the Assess It and have your student complete the "Drawing a Representation" activity page.
- 2. When they are finished, submit the document by scanning it or taking a photo of it and uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

## **Finding an Addend**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

rewrite subtraction problems as missing addend problems

#### **Materials**

base ten blocks

## **Subtract with Missing Addends**



### **Activate**

- 1. Give your student the problems "5 2 =" and "5 3 =." Allow them to solve the problems by any method of their choice.
- 2. Ask your student if they notice anything about the two solutions. Discuss that they are part of a fact family.



- 1. Begin with the **Read It** and read to your student about breaking numbers apart into tens and ones.
- 2. Give your student additional problems and use base ten blocks to model the problems. Finish with the Self Check.
- 3. Open the **Addition When Subtracting Watch It** and watch the video with your student. Pause the video as necessary to work through the problems or to discuss the content.
- 4. Open the **Fact Families-19 Play It** and help your student play the game. Feel free to play the game multiple times or until the content is mastered. Your student may need some help answering the questions. They can use any of the strategies they have learned so far.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice rewriting problems.
- 2. Use the **Show It AK** and work with your student to check their answers.



### **Topic**

## **Finding an Addend**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

identify a missing number in a pattern

#### **Materials**

- construction paper, 3 different colors
- glue stick

## **Missing Number in Pattern**



## **Activate**

- 1. Help your student draw a snake on one piece of construction paper and cut it out.
- 2. On paper of another color, draw and cut out ten small triangles that are able to fit on the snake.
- 3. On the last paper of another color, draw and cut out ten small circles that are able to fit on the snake.
- 4. Help your student arrange the triangles and circles on the snake in a pattern.



## **Engage**

- 1. Begin with the **Read It** and read to your student about finding a missing number in a pattern.
- 2. As a suggestion, create a few more patterns using numbers or objects. Remove a number or an object from the sequence, and have your student identify what is missing. Then, ask your student to create one for you to solve. Finish with the Self Check.
- 3. Open the **Missing Number Patterns Watch It** and view the video together with your student. Pause the video as necessary to discuss the content and to determine the missing numbers in each pattern.
- 4. Open the **Buck's Secret Vault-Dial Numbers Play It** and help your student play the game. Feel free to play the game multiple times or until the content is mastered.



### <u>Demonstrate</u>

- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, submit the document by scanning it or taking a photo of it and uploading it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

## **Naming Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

• identify rotated shapes

#### **Materials**

 tangrams - one square, one parallelogram, one triangle

## **Naming Rotated Shapes**



## **Activate**

- 1. Help your student to go on a shape hunt, looking for shapes around the room.
- 2. Discuss the shapes that were found, and the differences between them.



## <u>Engage</u>

- 1. Begin with the **Read It** and read about how shapes can look different if they are turned or rotated. Take note of the different colored corners of the shapes to show the turns and rotations.
- 2. A suggestion would be to use tangram shapes to physically see the rotations.
- 3. Finish with the Self Check.



- 1. Move on to the **Show It** and follow the directions to complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. The next time you go out for a walk with your student, look for different shapes on buildings, signs, and vehicles and note the different ways they are rotated.



**Topic** 

## **Naming Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

draw a triangle and a circle

#### **Materials**

- dry erase board and marker
- "Drawing Triangles and Circles" activity page
- cookie sheet
- sugar

## **Draw Triangles and Circles**



### **Activate**

- 1. On a sheet of paper, draw three dots that your student can connect to make a triangle. Do the same for a circle.
- 2. Have your student connect the dots to make the shapes.
- 3. Next, have them trace the shapes with their finger.
- 4. Discuss the differences between the edges of the triangle and the circle.



## **Engage**

- 1. Begin with the **Read It** and read about the differences between a triangle and a circle. Finish with the Self Check.
- 2. Next, open the **What Shape is it? Watch It** and view the video with your student. Pause the video as necessary to discuss the shapes and where they might be found.
- 3. Then, open Brick's Shapes City Circles Play It and have your student play the game.
- 4. Continue on to the next game. Open **Brick's Shapes Museum Triangles Play It**, and have your student engage in the game.
- 5. Have your student point out triangles and circles in the room.



- 1. Open the **Assess It** and have your student complete the activity to trace and draw triangles and circles.
- 2. When they are finished, check their work, and have them make corrections if needed.
- 3. Scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.
- 4. For extra practice drawing triangles and circles, fill a cookie sheet with a thin layer of sugar. Have your student use their finger to draw the shapes in the sugar.



**Topic** 

## **Naming Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

draw a square and a rectangle

#### **Materials**

dry erase board and marker

## **Draw Squares and Rectangles**



## **Activate**

- 1. On a sheet of paper, draw four dots that your student can connect to make a square. Do the same for a rectangle.
- 2. Have your student connect the dots to make the shapes.
- 3. Next, have them trace the shapes with their finger.
- 4. Discuss the differences between the edges of the square and the rectangle.



## <u>Engage</u>

- 1. Begin with the **Read It** and read about the difference between a square and rectangle. Finish with the Self Check.
- 2. Next, open the **Find Squares and Rectangles Watch It** and view the video with your student. Pause the video as necessary to discuss the shapes, and where you might find them.
- 3. Then, open Brick's Shapes Space Squares Play It, Brick's Shapes Museum Rectangles Play It, and Brick's Shapes Space Rectangles Play It, and have your student play the games until they have mastered the content.
- 4. Have your student point out squares and rectangles in the room.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice drawing squares and rectangles.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. The next time you go out for a walk with your student, look for squares and rectangles on buildings, signs, and vehicles.



**Topic** 

## **Naming Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

draw a square, circle, rectangle, and a triangle

#### **Materials**

- dry erase board and marker
- construction paper
- scissors
- glue
- · markers or crayons

## **Drawing Basic Shapes**



## **Activate**

- 1. Ask your student to draw a square, a circle, a rectangle, and a triangle. Help them as needed.
- 2. Discuss the differences between the four shapes.



## **Engage**

- 1. Begin with the **Read It** and read about the difference between a square, circle, rectangle, and triangle. Finish with the Self Check.
- 2. Next, ask your student to point out squares, circles, rectangles, and triangles in the room. Help your student keep a tally chart for each shape that they find.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice drawing shapes.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, ask your student to draw squares, circles, rectangles, and triangles on a piece of construction paper, and then cut them out.
- 4. Finally, on a separate piece of construction paper, have your student make a picture, using the shapes they just cut out, by gluing them to the construction paper. They can use markers or crayons to add detail to their picture.
- 5. Ask your student to show you their picture, and to identify the squares, circles, rectangles, and triangles.



**Topic** 

### **Naming Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

describe attributes of a circle and a triangle

#### **Materials**

- · construction paper
- glue
- scissors

## **Verbal: Circle and Triangle**



## **Activate**

- 1. Ask your student to name and find something shaped like a circle.
- 2. Ask your student to name and find something shaped like a triangle.



## <u>Engage</u>

- 1. Begin with the **Read It** and read about describing circles and triangles. Finish with the Self Check.
- 2. Then, open **Brick's Shapes Park Circles- Play It**, and have your student play the game until they have mastered the content.
- 3. Help your student to point out circles and triangles in the room and keep a tally chart for each shape. Have your student count the tallies to determine the winner.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice describing circles and triangles.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice with triangles and circles, make a construction paper ice cream cone. Instruct your student to draw or trace a triangle on a sheet of brown construction paper, and cut it out. Then, draw or trace circles on different colored paper of your choice, and cut them out. Glue the circles on the triangle to make an ice cream cone. Have your student decorate the ice cream cone as desired. To review, ask your student to show you their ice cream cone, and to point to and name the shapes it has.



**Topic** 

## **Naming Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

describe attributes of a square and rectangle

#### **Materials**

- construction paper
- scissors
- glue
- markers or crayons

## **Verbal: Square and Rectangle**



## **Activate**

- 1. Ask your student to name and find something shaped like a square.
- 2. Ask your student to name and find something shaped like a rectangle.



### **Engage**

- 1. Begin with the **Read It** and read about describing squares and rectangles. Finish with the Self Check.
- 2. Next, open the **Find Squares and Rectangles Watch It** and view the video with your student. Pause the video as necessary to discuss the content.
- 3. Then, open **Brick's Shapes Space Squares Play It** and **Brick's Shapes City Rectangles Play It**, and have your student play the games until they have mastered the content.
- 4. Help your student to point out squares and rectangles found in the room and keep a tally chart for each shape. Have your student count the tallies to determine the winner.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice describing squares and rectangles.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice with squares and rectangles, make a square and rectangle robot. Instruct your student to trace or draw squares and rectangles on any colored paper they would like. Help your student to cut out the squares and rectangles and glue them on another piece of paper to make a robot. Have your student decorate the robot as desired. To review, ask your student to show you their robot, and to point to and name the shapes it has.



**Topic** 

## **Naming Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

 describe the attributes of a circle, rectangle, square, and triangle

#### **Materials**

- dry erase board and marker
- cookie sheet
- sugar

## **Describing Basic Shapes**



## **Activate**

- 1. Ask your student to point to different shapes around the room, and have your student say the name of the shape as they point to it.
- 2. After your student points to a shape and says the name aloud, ask your student how they knew it was that shape (i.e. number of sides, corners, edges, etc.).



## **Engage**

- 1. Begin with the **Read It** and read about describing circles, rectangles, squares, and triangles.
- 2. Ask your student to guess the shape that you describe, and then take turns allowing them to describe a shape to you.
- 3. Finish with the Self Check.
- 4. This would be a good time to create a poster with your student that illustrates and lists the attributes of each shape.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice describing shapes.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student use their pointer finger to practice drawing shapes that you describe in a cookie sheet filled with sugar. Take turns, allowing your student to describe a shape to you to draw in the sugar.



**Topic** 

## **Identify and Describe Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

• identify a circle, square, rectangle, and triangle

#### **Materials**

none required

## **Naming Shapes**



## **Activate**

- 1. Find an object in your learning environment that has a circle shape.
- 2. Discuss the characteristics of a circle using descriptive words.



- 1. Start with the **Read It** and read about naming four basic shapes. Finish with the Self Check.
- 2. Open the **A Shape's Mess Watch It** and watch the video with your student. Pause the video as needed to discuss the shapes.
- 3. Continue with the **Look and Find-Shapes Play It**. Have your student play the game until the content is mastered.



- 1. Move on to the **Show It** and follow the directions to complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Continue to reinforce learning by asking your student to spot circles, squares, rectangles, and triangles in their surroundings everyday.



**Topic** 

## **Identify and Describe Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

identify a circle, square, rectangle, and triangle of different colors

#### **Materials**

- 4 crayons
- "Naming Shapes by Color" activity page

## **Naming Shapes by Color**



# **Activate**

- 1. On a sheet of paper, ask your student to draw a circle, a square, a rectangle, and a triangle.
- 2. Ask your student to color the shapes with crayons so that each shape is a different color.
- 3. Have your student name the shape by its color (for example, "green triangle").



- 1. Start with the **Read It** and read about different colored shapes. Finish with the Self Check.
- 2. Continue with the **Brick's Construction Zone-Shapes Play It** and the **Look and Find-Color and Shape Play It**. Have your student play the games until the content is mastered.



- 1. Move on to the **Show It** and follow the directions to complete the activity.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. To practice some more, you could draw multiple shapes of different colors on a sheet of paper. Have your student identify and circle all of the shapes that are the same, by circling them with the same color crayon. When they are finished, to practice naming shapes, ask your student to say out loud the name and color of the shapes they circled.



**Topic** 

## **Identify and Describe Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

• identify a circle, square, rectangle, and triangle of different sizes

#### **Materials**

- dry erase board and marker
- "Matching Shapes by Sizes" activity page

## **Matching Shapes by Size**



# **Activate**

- 1. On the dry erase board, ask your student to draw a triangle.
- 2. Now ask them to draw a triangle larger than that.
- 3. Compare and contrast the two triangles.



- 1. Begin with the **Read It** and read about shapes of different sizes. Finish with the Self Check.
- 2. Open the **Recognizing Shapes Watch It** and view the video with your student. Pause the video as needed to discuss the content.
- 3. Continue with **Memory Match-Shapes Play It** and have your student play the game until the content is mastered.



- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, submit their work by scanning the activity page or taking a photo of it and uploading it to the Dropbox. If your student did not miss any numbers, write "All correct" on your paper and submit it via the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

## **Identify and Describe Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- identify a sphere
- · Identify a cube

#### **Materials**

- marbles
- digital camera or smartphone

## **Identify Spheres**



## **Activate**

- 1. Ask your student to look at the marbles.
- 2. Then, ask your student what shape the marble looks like.
- 3. Ask your student if the marble is a flat shape or a three-dimensional shape and if they can think of another object that resembles the marble.



## **Engage**

- 1. Begin with the **Read It** and read about identifying spheres.
- 2. A suggestion would be to use real life spheres to make the lesson more hands-on. Finish with the Self Check.
- 3. Have your student name some games that use a sphere (basketball, baseball, soccer, bowling, golf, billiards).



## **Demonstrate**

- 1. Move on to the **Show It** and follow the directions to complete the activity to practice identifying spheres. You will need the smartphone or camera for this activity.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. The next time you play kickball, soccer, basketball, or baseball, ask your student what shape the ball is.



## **Identify a Cube**



- 1. Continue with the **Read It** and read about describing cubes. Finish with the Self Check.
- 2. A suggestion would be to have your student locate other examples of cubes in the room.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice identifying cubes.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice, have your student look for examples of cubes in their surroundings at home, at the store, and in everyday settings.



**Topic** 

## **Identify and Describe Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- identify a cone
- identify a cylinder

#### **Materials**

- newspaper
- tape
- scissors
- two toilet paper rolls or one paper towel roll
- glue
- · digital camera or smartphone
- construction paper

## **Identify Cones**



## **Activate**

1. Ask your student if they have ever eaten ice cream in a cone, or if they have seen an orange construction cone. Tell your student that today we will be learning to identify cones.



- 1. Begin with the **Read It** and read about identifying cones.
- 2. Then, open the **Making a Cone Watch It** and view the video with your student. Pause the video at 0:17 to review how to make a cone.
- 3. Help your student use the newspaper, scissors, and tape to make their own cone hat.



### **Demonstrate**

- 1. Move on to the **Show It** and follow the directions to complete the activity to practice identifying cones.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. The next time you go for a ride in the car with your student, have them count all of the cones they see.



## **Identifying Cylinders**



## **Activate**

- 1. Ask your student to look at the paper towel or toilet paper roll, and ask them to describe it. (Example: It looks like a tube with a circle on each end.)
- 2. Then, ask your student if they think this shape is a flat shape or a three-dimensional shape.



- 1. Begin with the **Read It**, and read about identifying cylinders. Finish with the Self Check.
- 2. Ask your student if they can think of any other things that are shaped like a cylinder.
- 3. Help your student make their own cylinder with paper.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice identifying cylinders.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra fun with cylinders, use two toilet paper rolls to make binoculars, or one paper towel roll to make a telescope. Your student can decorate as desired.





**Topic** 

### 2-D and 3-D Shapes

### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- identify flat and solid shapes
- identify differences between flat and solid shapes

#### **Materials**

geometric shapes

## **Naming Flat and Solid Shapes**



### **Activate**

- 1. Draw and cut out a circle, square, rectangle, and triangle for your student.
- 2. Have your student look at these shapes and the 3D geometric shapes.
- 3. Discuss the differences and similarities between the shapes.



## Engage

- 1. Begin with the **Read It**, and read about flat and solid shapes. Finish with the Self Check.
- 2. Ask your student which shape is their favorite, and why.



## emonstrate

- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the Assess It.

## **Recognize Flat and Solid Shapes**



## Engage

- 1. Begin with the **Read It**, and read about flat and solid shapes. Finish with the Self Check.
- 2. Then, view the **Spying for Shapes Watch It** together. Pause the video as needed to review the content.
- 3. Next, ask your student to match the flat shape that you created with its geometric shape partner.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice recognizing flat and solid shapes.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. The next time you go for a walk you can have a shape scavenger hunt. See how many different two-dimensional and three-dimensional shapes you and your student can find! See who can find the most and identify them correctly!



**Topic** 

## 2-D and 3-D Shapes

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

sort flat and solid shapes

#### **Materials**

- "Sorting Flat and Solid Shapes" activity page
- modeling clay

## **Sorting Flat and Solid Shapes**



## **Activate**

- 1. Ask your student to use modeling clay to make a circle, square, rectangle, triangle, sphere, cube, cylinder, and cone.
- 2. Have your student save their shapes to be used later in this lesson.
- 3. Discuss the differences and similarities between the shapes.



### **Engage**

- 1. Begin with the **Read It** and read about flat and solid shapes. Finish with the Self Check.
- 2. Next, open the **Simple Shapes Watch It** and view the video with your student. Pause the video as necessary to discuss the content.
- 3. Have your student sort their clay shapes into flat shapes and solid shapes.



- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.
- 3. For more practice, go on a shape hunt around the room. Ask your student to identify the shape, whether it is flat or solid, and tell a little bit about what makes it that particular shape (e.g. number of sides, two dimensional or three).
- 4. This would be a good time to add the attributes of three-dimensional shapes to the poster you created in lesson 157.



**Topic** 

## 2-D and 3-D Shapes

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

use vocabulary to sort objects

#### **Materials**

- geometric shapes (cube, cone, cylinder, and sphere)
- "Shape Sheet" printable

## **Math Vocabulary to Sort**



## **Activate**

- 1. Ask your student to look around the room for rectangles.
- 2. Ask your student to explain how the rectangles are the same and different.



## **Engage**

- 1. Begin with the **Read It** and read about using math vocabulary to sort shapes.
- 2. You will need to print and cut out the square, circle, rectangle, and triangle from the "Shape Sheet" printable for your student to complete the activity. Be sure to have them use just the square, circle, rectangle, and triangle.
- 3. Emphasize the difference between flat shapes and solid shapes. Finish with the Self Check.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice using math vocabulary to sort objects.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Finally, move on to the **Reinforce It** and have your student complete the activity.
- 4. Pause in your reading to have your student answer the questions.



**Topic** 

## 2-D and 3-D Shapes

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

describe attributes of a cube and a cone

#### **Materials**

geometric shapes - cube and cone

### **Describe Cube and Cone**



## **Activate**

- 1. Have your student look at the cube and cone.
- 2. Ask your student what they remember about each of these shapes.
- 3. Finally, discuss what is similar and different between these two shapes.



- 1. Begin with the **Read It** and read about cubes and cones. Finish with the Self Check.
- 2. Next, ask your student which flat shape matches the cube (square), and which flat shape matches the cone (triangle).



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice describing attributes of cubes and cones.
- 1. It may be helpful to revisit the poster you made with the attributes of the shapes.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Finally, ask your student to name all of the things they can think of that are shaped like a cube (example: dice), while you write them down. Then, do the same for cones (example: ice cream cone). Ask your student which shape has the longer list of examples.



**Topic** 

## 2-D and 3-D Shapes

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

describe attributes of a cylinder and a sphere

#### **Materials**

- geometric shapes cylinder and
- several toilet paper or paper towel rolls or construction paper
- tape
- marbles

## **Describe Cylinders and Spheres**



## **Activate**

- 1. Place the toilet paper or paper towel roll, and a marble on the table.
- 2. Ask your student to examine these objects, and to tell you what they notice about them.
- 3. Finally, discuss with your student the similarities and differences between these objects.



## **Engage**

- 1. Begin with the **Read It** and read about cylinders and spheres. Finish with the Self Check.
- 2. Ask your student which flat shape matches the cylinder (rectangle), and which flat shape matches the sphere (circle).



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice describing attributes of cylinders and spheres.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For some extra fun with cylinders and spheres, help your student make a cylinder track to race marbles down. You can use toilet paper or paper towel rolls, or make cylinders out of construction paper, and tape them together. Connect the cylinders together using tape to make a track. You can even build a couple of tracks, and race against each other.





**Topic** 

## 2-D and 3-D Shapes

### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- identify the number of sides of flat shapes
- identify the number of angles on flat shapes

#### **Materials**

- dry erase board and marker
- toothpicks and mini marshmallows

## **Number of Sides: Flat**



## **Activate**

- 1. Ask your student to name some flat shapes.
- 2. Ask your student what they remember about each of these shapes.



- 1. Begin with the **Read It** and read about counting sides on flat shapes. Finish with the Self Check.
- 2. Next, ask your student how many sides a triangle has. Repeat the question for each shape.



## emonstrate

- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the Assess It.
- 3. For some extra practice, draw the shapes, and count their sides.

## **Number of Angles: Flat**



- 1. Begin with the **Read It** and read about counting angles on flat shapes. Finish with the Self Check.
- 2. Then, view the **Angles of a Shape Watch It** together. Pause the video as needed to review the content.
- 3. Next, ask your student how many angles a triangle has. Repeat the question for each shape.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice counting the number of angles on flat shapes..
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. To review this lesson, you could have your student create two-dimensional shapes using toothpicks and mini marshmallows, and then ask them to give a presentation on the shapes they created, making sure to name the shapes and identify the number of sides and angles each has.



**Topic** 

## 2-D and 3-D Shapes

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

identify number of faces on solid shapes

#### **Materials**

geometric shapes

## **Solid Figure Faces**



## **Activate**

- 1. Ask your student to name some solid shapes.
- 2. Ask your student what they remember about each of these shapes.



## **Engage**

- 1. Begin with the **Read It** and read about the faces of solid shapes. Finish with the Self Check.
- 2. Then, view the **Faces, Edges, and Vertices Watch It** together. Pause the video as needed to discuss the content.
- 3. Next, ask your student to point to and count the number of faces on a cube. Repeat this for each shape using the geometric shapes to help your student.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice recognizing flat and solid shapes..
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Ask your student to tell you what their favorite solid figure is and why. Then, ask your student how many faces that shape has.





**Topic** 

### 2-D and 3-D Shapes

### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- identify the number of edges solid shapes have
- Identify the number of corners solid shapes have

#### **Materials**

- geometric shapes
- mini marshmallows
- toothpicks

## **Solid Figure Edges**



## **Activate**

- 1. Ask your student to stack some cubes on top of each other to make a tower.
- 2. Ask your student what they notice about the tower of cubes.



## Engage

- 1. Begin with the **Read It** and read about the edges of solid shapes. Finish with the Self Check.
- 2. Next, ask your student to point to and count how many edges a cube has. Repeat the questioning for each shape, using the geometric shapes to help your student.



## emonstrate

- 1. Move on to the **Show It** and follow the directions to complete the activity to practice identifying edges.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. As some extra practice, play a game with your student, by giving them the following clues, and having them say which shape it is.
  - This shape is a solid shape with no straight edges and one curved face. (sphere)
  - This shape is a solid shape with one curved face and one flat face shaped like a circle. (cone)
  - This shape is a solid shape that has one curved face and two flat faces shaped like circles. (cylinder)
  - This shape is a solid shape that has six flat, square faces, twelve straight edges, and eight corners. (cube)

## **Solid Figure Corners**



- 1. Begin with the **Read It** and read about the corners of solid shapes. Finish with the Self Check.
- 2. Next, ask your student to point to and count the number of corners on a cube. Repeat the questioning for each shape, using the geometric shapes to help your student.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice identifying corners.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For a fun challenge, help your student to try to make a cube using the mini marshmallows and toothpicks. Remind them, that a cube has six faces, twelve edges, and eight corners.



**Topic** 

# **Analyze and Create Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

sort open and closed shapes

#### **Materials**

tangrams

# **Open and Closed Shapes**



# **Activate**

- 1. Ask your student to use the tangrams to make a design of their choice.
- 2. As your student is working on their design, ask them what they remember about each of these shapes.



## <u>Engage</u>

- 1. Begin with the **Read It** and read about open and closed shapes. Finish with the Self Check.
- 2. Next, ask your student how they know if a shape is closed or open. Use a T-chart to record their answers.
- 3. Review the attributes of closed and open shapes.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice identifying open and closed shapes.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. As an extra review, have your student draw some open and closed shapes on paper, and color in the closed shapes.



## **Topic**

## **Analyze and Create Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objectives:

- describe attributes of flat shapes
- describe attributes of solid shapes

#### **Materials**

- geometric shapes
- toothpicks
- modeling clay
- · construction paper
- glue
- scissors

## **Compare Flat Shapes**



# **Activate**

- 1. Ask your student to use the toothpicks to make some flat shapes. Save the shapes for later in the lesson.
- 2. Then, ask your student to use the modeling clay to make some solid shapes. Save the shapes for later in the lesson.
- 3. After your student has finished making a shape, ask them to tell you the attributes of that shape.



## **Engage**

- 1. Begin with the **Read It** and read about flat shapes. Finish with the Self Check.
- 2. Next, open the **A Shape's Mess Watch It** and watch the video with your student. Pause the video as necessary to discuss the content.



## **Demonstrate**

- 1. Move on to the **Show It** and follow the directions to complete the activity to practice describing flat shapes.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. For extra practice with flat shapes, have your student glue the toothpicks to a piece of paper creating flat shapes. Have your student write the number of sides and angles each shape has next to it.



## **Compare Solid Shapes**



### **Engage**

- 1. Begin with the **Read It** and read about solid shapes. Finish with the Self Check.
- 2. Open the **A Garden of Solids Watch It** and watch the video with your student. Pause the video as necessary to review the shapes.
- 3. Finally, ask your student to match the solid shapes with the ones they made out of the modeling clay, and explain why they are the same shape.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice identifying solid shapes.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Have your student look around their kitchen and home to find objects that are solid shapes. They could identify a coffee can as a cylinder, an orange as a sphere, or cheese shaped in cubes.



**Topic** 

# **Analyze and Create Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

identify attributes of shapes

#### **Materials**

- geometric shapes
- "Shape Rules" activity page
- "Shape Sheet" printable

## **Shape Rules**



# **Activate**

- 1. Ask your student to join you in playing a game.
- 2. Tell your student you are thinking of a shape. They may ask you ten questions to try to figure out your shape. If your student has not guessed the shape after asking the ten questions, then the game starts over with them still asking the questions. But, if they do guess correctly, then they get to think of a shape, and you must ask your student questions to guess it.
- 3. Continue playing the game for two more shapes.



- 1. Begin with the **Read It** and read about comparing shapes. Finish with the Self Check.
- 2. Next, open the **Sorting Solids Watch It** and watch the video with your student. Pause the video as necessary to discuss where each shape belongs on the chart.
- 3. Print the "Shape Sheet" printable and cut out the shapes for your student to sort.
- 4. A suggestion would be to have your student sort the shapes, both flat and solid, based on the following:
  - Put all the shapes that have corners together.
  - Put all the shapes that have edges together.
  - Put all the solid shapes that have flat faces together.



- 1. Open the **Assess It** and have your student complete the activity.
- 2. When they are finished, scan the document or take a photo of it and upload it to the Dropbox. For additional instructions on how to use the Dropbox, click on the paper clip icon in the upper-left corner of the **Assess It**.



**Topic** 

## **Analyze and Create Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

· describe size and orientation of shapes

#### **Materials**

building blocks

## **Compare Shapes**



# **Activate**

- 1. Ask your student to build something using the blocks.
- 2. Then, ask your student to point to one of the blocks they used to make their creation.
- 3. Next, ask them if they can find more examples of the same shape in their construction.
- 4. Discuss if the matching shapes are all the same size, and if they are facing a different direction.



### **Engage**

- 1. Begin with the **Read It** and read about comparing shapes. Finish with the Self Check.
- 2. Next, ask your student to draw two shapes of the same kind (Example: two squares, two triangles), but one should be bigger than the other, and should be facing a different way. Discuss how the drawings are the same and different from each other.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice comparing shapes.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Take a walk around the room. Have your student look for two objects or toys that are the same shape, but perhaps are a different size, or perhaps are in a different position. Have your student compare them. Also, have your student tell how they are different.



**Topic** 

### **Model Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

· draw shapes by attributes

#### **Materials**

- dry erase board and marker
- tangrams

## **Drawing Shapes**



# **Activate**

- 1. Ask your student to name some flat shapes.
- 2. Ask your student to find the tangram that matches the following clues.
  - This flat shape has four corners, and four equal lines. (square)
  - This flat shape has three corners, and three lines. (triangle)



## **Engage**

- 1. Begin with the **Read It** and read about drawing shapes. Finish with the Self Check.
- 2. Open the **Geometric Shapes Watch It** and make note of the username and password provided on the Discovery Education image. Click the link for the video and enter the provided username and password to watch. View the watch it together, and discuss the content. Pause as necessary to understand how shapes can be found everywhere.
- 3. To review polygons, start the video at 1:13.
- 4. To review vertices, start the video at 3:09.
- 5. Have your student draw a picture of a building, using many different shapes.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice drawing shapes.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. The next time you are outside, use a piece of chalk to play a shape game. Have one person name the attributes, and the other person draw the shape on the sidewalk using chalk. Switch jobs, so you each get a turn.



**Topic** 

## **Model Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

make solid shapes with clay

#### **Materials**

- geometric shapes
- modeling clay or play dough

# **Create Shapes with Clay**



# **Activate**

- 1. Ask your student to make something using the modeling clay.
- 2. Then, ask your student about what they made, and if they used any solid shapes to make their creation.



- 1. Begin with the **Read It** and follow the directions to make shapes with clay. Finish with the Self Check.
- 2. Next, open the **Building a Castle of Solids Watch It** and watch the video with your student. Pause as necessary to understand how to make each shape with clay.
- 3. A suggestion would be to make the shapes as done in the video.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice making shapes.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Use the clay to make more shapes, but instead of using the shapes to make a castle, make something else (examples: a house, an animal, or a car).



**Topic** 

## **Model Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

make flat shapes

#### **Materials**

- string
- toothpicks
  - craft sticks or popsicle sticks

# **Building Shapes**



# **Activate**

- 1. Ask your student if they like to build things.
- 2. Then, ask your student what shapes they might see in buildings.
- 3. Finally, ask your student to pretend they are a contractor, who has been asked to build some shapes, during this lesson.



### Engage

- 1. Begin with the **Read It** and read about making shapes with string or toothpicks. Finish with the Self Check.
- 2. Next, ask your student (contractor) to build a rectangle, first with the string, then with the toothpicks.
- 3. Finally, discuss whether it was easier to build the rectangle with the string or the toothpicks, and why.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice making flat shapes.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. Use craft sticks or popsicle sticks to make different shapes. Glue the sticks together and decorate to make different shaped picture frames.



**Topic** 

## **Composing Simple Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

combine shape blocks by flipping, sliding, or turning them

#### **Materials**

tangrams

## **Composing Shapes Using Blocks**



# **Activate**

- 1. Tell your student you have a riddle, and were wondering if they would help you solve this riddle.
- 2. You have two triangles (use two triangle tangrams). These two triangles make another shape, when put together. What other shape can they make?
- 3. Give your student time to try solving the riddle.
- 4. Talk about what your student did (or what you did, if your student could not solve the problem) to make the square.



- 1. Begin with the **Read It** and read about combining shape blocks. Finish with the Self Check.
- 2. Next, open the **Slides, Flips, and Turns Watch It** and watch the video with your student. Pause the video as necessary to review flips, slides, and turns.
- 3. Next, ask your student to use the tangrams to create a picture by turning, flipping, and sliding the shapes around. Have fun creating your own pictures.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice combining shapes.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. The next time you are putting a puzzle together with your student, remind them to turn or slide pieces to make them fit.



**Topic** 

## **Composing Simple Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

build pictures by using shape blocks to match pictures

#### **Materials**

- geometric shapes
- string or toothpicks

# **Building Pictures**



# **Activate**

- 1. Tell your student to use the geometric shapes to build something of their choice.
- 2. Ask your student what they would do if they did not have enough square blocks.
- 3. Finally, ask your student if there are any other shapes that can be made by flipping, turning, or sliding two of the same geometric shapes (examples: you can use two triangles to make a diamond or two squares to make a rectangle).



## **Engage**

- 1. Begin with the **Read It** and read about building with geometric shapes. Finish with the Self Check.
- 2. Next, open the **Shapes + Shapes = Bigger Shapes Watch It** and watch the video with your student. Pause the video as necessary to discuss the content.
- 3. Next, ask your student to use the geometric shapes to make another creation.
- 4. Ask your student to count how many of each shape they used.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice using geometric shapes to match a given picture.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. You can also use real life pictures to try to match what you want to build using the geometric shapes.



**Topic** 

## **Composing Simple Shapes**

### **Learning Objectives**

The activities in this lesson will help your student meet the following objective:

complete a puzzle by flipping, turning and sliding pieces

#### **Materials**

- small puzzle
- tangrams

# **Complete a Puzzle**



# **Activate**

- 1. Ask your student if they remember the three ways to move a shape (flip, turn, slide).
- 2. Ask your student if they know of any other time when they would have to flip, turn, or slide something to make it fit (completing a puzzle).



- 1. Begin with the **Read It** and read about puzzles. Finish with the Self Check.
- 2. Next, open the **Tangrams: Building with Shapes Watch It** and watch the video with your student. Pause the video as necessary to allow your student to try to match the pictures using the tangrams.
- 3. Next, ask your student to use the tangrams to make their own creation.



- 1. Move on to the **Show It** and follow the directions to complete the activity to practice completing a puzzle.
- 2. Use the **Show It AK** and work with your student to check their answers.
- 3. You can make your own puzzle, by taking a square piece of paper, coloring a picture on it, and then cutting it apart into pieces that can easily be put back together. Have fun trying to put it back together.