

BIG IDEA: Data and Decision Making: Posing questions, collecting, organizing, representing, and analyzing data are integral to decision-making in real life. Children have a high level of curiosity and many questions to ask. Problem posing, data collection, and analysis as a regular feature during math time will promote children’s learning.

- Have children work in small groups to propose a question and write it.
- Choose questions to discuss with the class.
- Children can collect data and represent them. They should also discuss the results and explain their conclusions.

The children are motivated by their ownership or the personal nature of the study. Examining real-life questions makes them understand the value of mathematics outside the classroom. “Through their investigations, young students should develop the idea that data, charts, and graphs give information. When data are displayed in an organized manner, class discussions should focus on what the graph or other representation conveys and whether the data help answer the specific questions that were posed.” (NCTM 200, p.113) First graders engage in collecting and using data to answer questions relevant to their lives. Students will form questions, collect data in a chart or table, organize the data, and interpret the results.

Adapted from Go Math: Teaching for Depth, pg. 413E

Quarter 4 Fluency Resources:

[Fluency Resources in Go Math](#)
[Building Fluency Through Word Problems](#)

[Building Fluency Through Number Talks: Making Tens](#)
[Building Fluency Through Number Talks: Friendly Numbers](#)


ESSENTIAL QUESTION: How can graphs and charts help you organize, represent, and interpret data?

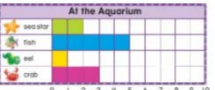



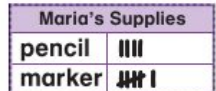
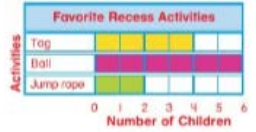

STANDARDS: 1.MD.4

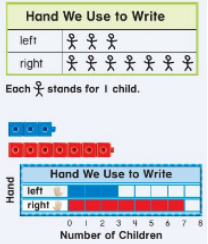

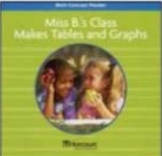

ELD STANDARDS:

- ELD.PI.1.1-Exchanging information/ideas via oral communication and conversations.
- ELD.PI.1.3-Offering opinions and negotiating with/persuading others.
- ELD.PI.1.5-Listening actively and asking/answering questions about what was heard.

- ELD.PI.1.9-Expressing information and ideas in oral presentations.
- ELD.PI.1.11-Supporting opinions or justifying arguments and evaluating others’ opinions or arguments.
- ELD.PI.1.12-Selecting and applying varied and precise vocabulary.

| Lesson | | Standards & Math Practices | Essential Question | Math Content and Strategies | Models/Tools Go Math! Teacher Resources G1 | Connections (ENGAGE prior knowledge) | Vocabulary | Academic Language Support | Journal |
|--------|--------------------------------|---|---|---|---|--|--|--|--|
| 10.1 | Read Picture Graphs | 1.MD.4 MP 3 MP 4 Companion Pg. 137 | What do the pictures in a picture graph show? | In this lesson, children analyze data that has been recorded in a picture graph. A picture graph uses pictures or symbols to represent data, and each symbol may stand for a set number of things. You might give children additional experiences reading picture graphs found in newspapers and magazines. | Math Board, blue and green connecting cubes, colored tiles, counting bears, shapes, post-it notes Number Line TR25 Ten Frame TR29 | List the following zoo animals on the board: lion, tiger, and gorilla. Have students identify their favorite animal from the list by placing a post it next to the animal. Have children discuss what they notice from the information on the board. Examples: How many people chose..? Which did more people choose? How many fewer people chose __ than __? How many more people chose __ than __? | picture graph How many more? How many fewer? | ELD Standards <ul style="list-style-type: none"> • ELD Standards • ELA/ELD Framework • ELPD Framework • ELL Math Instruction Framework • Integrating the ELD standards into Math | Draw a graph to show a row with 6 smiley faces and then a row with 5 sad faces. How many more smiley faces are there? |
| 10.2 | Hands On • Make Picture Graphs | 1.MD.4 MP 3 MP 4 Companion Pg. 137 | How do you make a picture graph to answer a question? | In this lesson, children use symbols or pictures to collect, organize, and record data. As children create picture graphs, they may ask if there is only one symbol they can use to make the | Math Board, two-color counters, post-it notes, numeral cards | Give students 3 options of snack choices (gold fish, fruit snacks, grapes). Have students write their snack preference on a post-it note. Organize the data and ask greater than less than questions. Pair up students with numeral card sets (can be a | picture graph How many more? | Access Strategies <ul style="list-style-type: none"> • Organizing Learning for Student Access to Challenging Content |  <p>Write 3 questions that can be answered by this picture graph.</p> |

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| | | | | graphs. Children need to specify the picture and its value for the graph. | Number Comparison Mat Number 0-11 Cards Number 12-20 Cards Number Line TR25 Ten Frame TR29 | deck of cards or 1-20 cards). Have pairs choose two numeral cards and compare the two with the greater than less than mats. | How many fewer? | <ul style="list-style-type: none"> Student Engagement Strategies Problem Solving Steps and Approaches Equitable Talk <ul style="list-style-type: none"> Accountable Talk Simply Stated Equitable Talk Conversation Prompts Accountable Talk Posters Five Talk Moves Bookmark Effective Math Talks | | | | | | | |
| 10.3 | Read Bar Graphs | 1.MD.4 MP 3 MP 4 Companion Pg. 137 | How can you read a bar graph to find the number that a bar graph shows? | A picture graph uses a picture or a symbol to represent each thing, and children need to count the pictures or symbols in a row to determine the number. A bar graph uses shaded bars to represent data, and children need to look at the length of the bar to determine the number. | Math Board, two-color counters, post-it notes Number Line TR25 Ten Frame TR29 | Place post-it notes on different numbers of days for each week on your calendar for this month. Ask; which week has the most notes; which week has the fewest notes? What is another way that we could organize this data? | bar graph compare the lengths least to most | <ul style="list-style-type: none"> Cooperative Learning Role Cards Collaborative Learning Table Mats Seating Chart Suggestions |  <p>Use numbers and pictures to compare the sea star to the fish in this bar graph.</p> | | | | | | |
| 10.4 | Hands On • Make Bar Graphs | 1.MD.4 MP 3 MP 4 MP 8 Companion Pg. 137 | How does a bar graph help you compare information? | When making bar graphs in this lesson, children may find it helpful to represent the data with connecting cubes before recording in the grid. | Math Board, connecting cubes Number Line TR25 Ten Frame TR29 | Arrange students in three rows, aligned to the left, to represent different data points. Ask describing questions: what does this graph show, how many students are in row 1/2/3, which row has the greatest/fewest number, how might we use this information, etc... | bar graph | Vocabulary Strategy <table border="1" data-bbox="2002 738 2244 844"> <tr><td>Word</td><td></td></tr> <tr><td>Meaning</td><td></td></tr> <tr><td>Example</td><td></td></tr> </table> | Word | | Meaning | | Example | | Create a bar graph about your favorite toys in your home. Write a title and labels. |
| Word | | | | | | | | | | | | | | | |
| Meaning | | | | | | | | | | | | | | | |
| Example | | | | | | | | | | | | | | | |
| 10.5 | Read Tally Charts | 1.MD.4 MP 2 MP 3 MP 4 Companion Pg. 137 | How do you count the tallies on a tally chart? | In this lesson, children analyze data that has been recorded with tally marks. Tallying is a quick way to show how many. It is also helpful when recording the results of a survey or sorting several different types of things into groups. | Math Board, two-color counters, red and yellow crayons Number Line TR25 Ten Frame TR29 | On math boards draw tally marks for numbers 1-10. Point out that each tally mark can stand for: one item, one vote, one animal, one activity, and so on. Draw tallies in groups of 5. Make sure students understand that tally marks are organized in groups of 5 with four vertical lines, and then a fifth line is drawn through the first four. Practice counting tallies in ones and groups of five. | tally chart, tally mark greater than, less than, equal to | Vocabulary Builder Greatest to Least  Vocabulary Builder Which Has More?   | Use words, numbers, or pictures to show how to group and count tally marks for the number 8. | | | | | | |
| 10.6 | Hands On • Make Tally Charts | 1.MD.4 MP 1 MP 3 MP 4 Companion Pg. 137 | Why is a tally chart a good way to show information that you have collected? | Children use tallies to collect, organize, and record data. As children create and analyze tally charts, they connect to a variety of skills in the number and operations strand. | Math Board Counters Number Line TR25 Ten Frame TR29 |  <p>What information is represented on this tally chart? If Maria's mom gave her three more pencils how would we represent that information on the chart? Have students draw the chart with the additional tally marks on your math boards. How many pencils does Maria have now? Does Maria have more pencils or markers? How do you know?</p> | tally chart, tally mark most likely, least likely | Model and Discuss Bar Graph  <p>Use a bar graph to organize data.</p> |  <p>Write 2 questions that can be answered by this tally chart.</p> | | | | | | |

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| 10.7 | Problem Solving • Represent Data | 1.MD.4 MP 3 MP 6 Companion Pg. 137 | How can showing information in a graph help you solve problems? | As children use different methods to represent data, they must be careful to label their graphs and charts accurately. In this lesson, children will learn how to convert information from a tally chart to a bar graph. They will also discover the importance of labeling. | Math Board Counters Number Line TR25 Ten Frame TR29 | Have students use different methods to represent data. They must carefully label their graphs and charts correctly. Prompt: I have been given information about our Favorite Recess Activities. The three categories are: tag, four square, and hula hoops. 5 students' favorite activity is tag, 7 students picked four square, and 2 students chose hula hoops. Show this information on a graph/chart. Have students share their representations with pairs/groups. Select different student samples to discuss/share whole group. | Picture graph, bar graph, tally chart, tally mark | <p>Picture Graph</p>  <p>Use a picture graph to organize data.</p> <p>Tally Chart</p>  <p>Use tally charts to organize data.</p> <p>Literature Connection</p> <p>Literature</p>  <p>Miss B's Class Makes Tables and Graphs</p> <p>Literature</p> <p><i>Miss B's Class Makes Tables and Graphs</i></p>  <p>Read the story and learn how to gather and compare data by making tally tables and graphs.</p> | Write the names of 3 different animals. Count the letters in each name. Make a bar graph showing the letters for each animal. |
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Assessments:

Go Math [Chapter 10 Test](#)

Go Math Chapter 10 Performance Task [Colors and Flavors](#)

****Common Assignment** Critical Area Performance Task [Max Takes Measurements](#)

BIG IDEA: Students begin interacting with shapes in their environments long before they begin formal schooling. It is important to connect those early experiences with more structured school activities.

- Focus should be placed on the transition from descriptive attributes such as color and size to more defining attributes such as number and shapes of flat surfaces.
- Once children learn defining attributes of shapes, they can use those attributes to name the shapes.
- Children can explore their classroom and home environments and name real-world objects such as cubes (ice cubes), rectangular prisms (boxes), cones (ice cream cones), and cylinders (cans or glue sticks).

Children focus on identifying attributes to describe and sort three-dimensional shapes; they use those attributes to compare shapes. They will begin to recognize shapes from different perspectives and orientations. Students will determine how they are alike and different. Children compose and decompose shapes. First graders will build on the understanding of part-whole relationships, as well as, the properties of the original and composite shapes.

Adapted from Go Math: Teaching for Depth, pg. 457C

Professional Development Videos: [Explore Solid Figures](#)

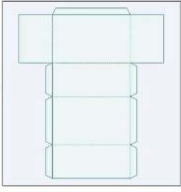
ESSENTIAL QUESTION: How do you identify and describe three-dimensional shapes?

STANDARDS: 1.G.1, 1.G.2

ELD STANDARDS:

- ELD.PI.1.1-Exchanging information/ideas via oral communication and conversations.
- ELD.PI.1.3-Offering opinions and negotiating with/persuading others.
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- ELD.PI.1.9-Expressing information and ideas in oral presentations.
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- ELD.PI.1.12-Selecting and applying varied and precise vocabulary.

| Lesson | | Standards & Math Practices | Essential Question | Math Content and Strategies | Models/Tools Go Math! Teacher Resources G1 | Connections (ENGAGE prior knowledge) | Vocabulary | Academic Language Support | Journal |
|--------|---|--|--|---|--|--|---|--|---|
| 11.1 | Hands On • Three-Dimensional Shapes | 1.G.1 MP 4 MP 8 Companion Pg. 180 | How can you identify and describe three-dimensional shapes? | Geometry awakens children’s awareness of the shapes of real-world objects and integrates children’s understanding of number and measurement. Children use numbers to describe attributes of shapes, and they apply measurement concepts as they consider the relative sizes of parts of shapes. | Math Board, models of realistic three-dimensional shapes, three-dimensional shapes 3D Shape Templates | Identify and describe shapes with 2 dimensional pattern blocks (squares, circles, triangles, rectangles, hexagons). Also review 3-dimensional solids (cubes, cones, cylinders, and spheres). Have students do a shape walk around the room describing shapes with a partner. | cone, cube, curved surface, cylinder, flat surface, rectangular prism, sphere | Model and Discuss  | Use pictures or words to describe a cone. |
| 11.2 | Hands On • Combine Three-Dimensional Shapes | 1.G.2 MP 1 MP 2 MP 3 Companion Pg. 181 | How can you combine three-dimensional shapes to make new shapes? | Children are in frequent contact with common three-dimensional shapes such as balls (spheres), cereal boxes (rectangular prisms), and toy blocks (cubes). While children can identify the shapes of these real-world objects, they may find it difficult to combine and describe three-dimensional shapes. Work with children to first identify the two shapes they will put together. Then | Math Board, models of realistic three-dimensional shapes | Review three-dimensional shapes in the real world (baseball, book, can of soup, cereal box, etc...) Ask students what happens if we put two of those shapes together? One on top of the other? Use blocks to build new shapes. | cylinder, rectangular prism, cone, cube | Use shape templates to create 3 dimensional representations. | Combine two shapes to make a new shape. Describe how you put the shapes together. |

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| | | | | ask the following: How is your new shape like the shapes you used to build it? How is it different? | | | | | |
| 11.3 | Hands On • Make New Three-Dimensional Shapes | 1.G.2 MP 1 MP 2 MP 3 Companion Pg. 181 | How can you use a combined shape to build new shapes? | Children use what they learned about combining three-dimensional shapes to create new shapes. Using concrete objects, children explain their reasoning as they identify attributes and the positions of their shapes in the new construction. They become better at identifying characteristics of new shapes as they work with models to find which combinations are reasonable. | Math Board, models of realistic three-dimensional shapes, three-dimensional shapes, magazines | Ask students guiding questions; How can you combine shapes to build new ones? What are some ways you can combine shapes? Why are some shapes easier to combine? Have pairs work together to find magazine pictures that show combined shapes. Then have the partners describe to each other how these shapes have been combined. | cylinder, rectangular prism, cube, cone, sphere, | | |
| 11.4 | Problem Solving • Take Apart Three-Dimensional Shapes Chart to Add | 1.G.2 MP 6 MP 7 MP 8 Companion Pg. 181 | How can acting it out help you take apart combined shapes? | In this lesson, children analyze a composite shape to determine the individual shapes from which it is made. Some children may immediately visualize which shapes are used in the composite shape and resist modeling the composite shape with three-dimensional shapes. Children adept at visualization should use blocks to verify what they visualize. | Math Board, models of three-dimensional shapes | Have students explain what they know about taking apart shapes? Students work in pairs. One partner builds a structure. The other partner takes apart the structure while naming the shapes used. Then students trade roles. | cone, cube, cylinder, rectangular prism | | |
| 11.5 | Hands On • Two-Dimensional Shapes on Three-Dimensional Shapes | 1.G.1 MP 1 MP 4 MP 6 Companion Pg. 180 | What two-dimensional shapes do you see on the flat surfaces of three-dimensional shapes? | In this lesson, children learn to identify and distinguish the shapes of the flat surfaces of three-dimensional shapes. | Math Board, models of three-dimensional shapes | Students describe attributes of three-dimensional shapes. Ask students to specifically describe the flat surfaces. Have students trace around the surface of shapes and describe the flat surface that they see. | cone, circle, triangle, cube, square, rectangular prism, rectangle, cylinder | | |

Literature Connection

Literature
April's First Word



Children read the book and identify three-dimensional shapes.

Literature
Building a Mini-Park



Children read the book and learn about three-dimensional shapes.

Use a cube and a cylinder to build a new shape. Repeat. Draw to show how you can combine these two new shapes to make a larger shape.

Draw a picture of a house made from shapes. Write the shape names you used.

Use pictures or words to explain how you would describe the shapes of flat surfaces you may see on a tissue box.

Assessments:

Go Math [Chapter 11 Test](#)

Go Math Chapter 11 Performance Task [Making Shapes](#)

BIG IDEA: Students will explore two-dimensional geometry by working with drawings, concrete models, or electronic tools. Children should be given opportunities to sort shapes according to the attributes they choose. Initially, they tend to focus on color and size as key attributes. When children are presented with shapes that are the same color and do not differ significantly in size, they will begin to focus on attributes such as straight sides and number of vertices.

Composing and decomposing shapes provide children with the opportunities to further explore two-dimensional shapes. These activities help children compare shapes and find similarities such as equal side lengths. This exploration also provides opportunities for children to build shapes that they need to become more familiar with. When children decompose shapes, they find the individual shapes that have been placed together to form the shape. This activity helps children develop the concept of parts of a whole. When a shape is decomposed into equal parts, children are engaging in an activity that serves as foundational learning for fractions.

Adapted from Go Math: Teaching for Depth, pg. 485E

Professional Development Videos: [Explore Plane Figures](#)


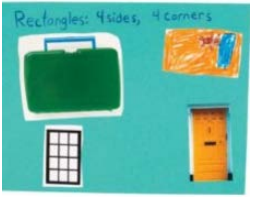
ESSENTIAL QUESTION: How do you sort and describe two-dimensional shapes?

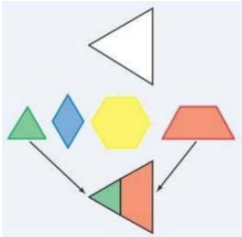

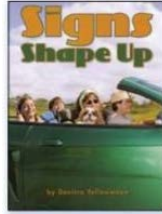


STANDARDS: 1.G.1, 1.G.2, 1.G.3

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| Lesson | | Standards & Math Practices | Essential Question | Math Content and Strategies | Models/Tools Go Math! Teacher Resources G1 | Connections (ENGAGE prior knowledge) | Vocabulary | Academic Language Support | Journal |
|--------|--|--|---|--|--|--|---|--|--|
| 12.1 | Sort Two-Dimensional Shapes | 1.G.1 MP 6 MP 7 MP 8 Companion Pg. 180 | How can you use attributes to sort two-dimensional shapes? | In this lesson about two-dimensional shapes, children distinguish between defining attributes, such as number of sides and being closed or open, and non-defining attributes, such as color, orientation, and overall size. They learn that both common and different looking two-dimensional shapes, also known as flat and plane shapes can be sorted in more than one way. | Math Board | Practice naming two-dimensional shapes whole group. Have students sort two-dimensional pattern blocks. Students explain to a partner their reasoning. Ask students to sort their shapes in a new way. Again have students explaining their thinking. | circles, rectangles, sides, square, triangles, vertices | Vocabulary Strategy Vocabulary Builder More Shapes  <small>Display the shapes to introduce trapezoid and hexagon. Have children share their observations about each shape. Then ask questions to generate discussion about ways these shapes are alike or different from other shapes.</small> | Name a sorting rule for 1 square, 1 rectangle, and 1 triangle. |
| 12.2 | Hands On • Describe Two-Dimensional Shapes | 1.G.1 MP 6 MP 7 MP 8 Companion Pg. 180 | What attributes can you use to describe two-dimensional shapes? | Exploring the attributes of shapes is a first step in developing geometrical ideas. As you work through this lesson, help children relate what they are learning to the world around them. As children explore the relationship between the number of sides and the number of vertices in familiar polygons, they are beginning their study of an important part of mathematics, one related to other areas of mathematics and one used in many professions. | Math Board, models of two-dimensional shapes, glue, pattern blocks, red and blue crayons | Ask students where they have seen; squares, rectangles, triangles, and circles outside of school. What attributes can you use to describe two-dimensional shapes. Sides? Vertices? | hexagon, trapezoid | Model and Discuss  | Use pictures and words to show the attributes of a hexagon. |

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| 12.3 | Hands On • Combine Two-Dimensional Shapes | 1.G.2 MP 5 MP 6 Companion Pg. 181 | How can you put two-dimensional shapes together to make a new two-dimensional shape? | An effective way to teach lessons that introduce the ideas of informal geometry is to let children explore and experiment. In addition to the explorations in composing shapes presented in this lesson, encourage children to find other ways to use the triangles and rhombuses to build trapezoids and hexagons and to use the pattern blocks to make other shapes. | Math Board, pattern blocks | Students will compose shapes from triangles and rhombuses to build new shapes. What new shapes can the students compose? Can students create triangles, rectangles, and squares in many different ways? | triangle, trapezoid, hexagon, rhombus, rectangle | Use real world representations.  | Draw the shapes you could put together to make a rectangle. |
| 12.4 | Combine More Shapes | 1.G.2 MP 1 MP 4 Companion Pg. 181 | How can you combine two-dimensional shapes to make new shapes? | As you teach this lesson, some children may not understand that the shapes must be turned over and around to make new shapes. These children may not yet understand that the position of a shape does not define the shape. Help children understand that a shape is the same despite its orientation. | Math Board, models of two-dimensional shapes, Two-Dimensional Shapes Two-Dimensional Shapes | Ask: What do you know about combining shapes? Use the Two-Dimensional Shapes tool to have students create new two-dimensional shapes. What happens when you rotate the shapes? Turn the shape over? Turn the shape around? | triangle, square, rectangle, circle, hexagon | Building new shapes from multiple shapes.  How can we build and take apart 2 dimensional shapes? | Draw two shapes. Then draw what they would look like if you put them together to make a new shape. |
| 12.5 | Problem Solving • Make New Two-Dimensional Shapes | 1.G.2 MP 1 MP 4 Companion Pg. 181 | How can acting it out help you make new shapes from combined shapes? | Some children may wonder why they need to solve problems about geometry. Tell children that real-life problems are solved with all kinds of mathematics. Using an understanding of how shapes may be composed or decomposed is an important skill in life and in many careers. | Math Board, Two-Dimensional Shapes Triangles | How many new shapes can you make with triangles? How many triangles did you use? Are they all the same size? | circle, square, rectangle, triangle, trapezoid, rhombus | Literature Connection Literature  <i>Signs Shape Up</i> Children read the book and identify shapes of signs. | Use pictures to show how you can make a new shape using a combined shape made from two trapezoids. |
| 12.6 | Hands On • Find Shapes in Shapes | 1.G.2 MP 4 MP 5 Companion Pg. 181 | How can you find shapes in other shapes? | In this lesson, children build their visualization skills as they work with composite shapes to find the shapes that compose them. To do this, children must identify which shapes were put together to create the composite shape. Pattern blocks are excellent tools children can use as they analyze composite shapes. | Math Board, pattern blocks | Have students explain what they know about shapes they see in other shapes. Point out or list items in the classroom for students to discuss. Have students describe the shapes they see in each object. | triangle, hexagon, trapezoid, rhombus |  <i>Signs Shape Up</i> Children read the book and identify shapes of signs. | Use pictures or words to explain what shapes can be put together to make a hexagon shape. |
| 12.7 | Take Apart Two-Dimensional Shapes | 1.G.2 MP 1 MP 7 Companion Pg. 181 | How can you take apart two-dimensional shapes? | As children explore geometric concepts, it is important that they are able to describe and recognize the attributes of two-dimensional shapes. Children use these skills when they decompose shapes by drawing lines to create new shapes within a given shape. | Math Board, orange and purple crayons Pattern Blocks | Compose a shape using two or more pattern blocks. Name and describe the shape. Decompose the shape naming the parts that make up the shape along the way. | triangle, square, rectangle, circle | Literature Signs Shape Up  Children read the book and identify the shapes of signs. | Draw a shape. Then draw one or two lines to show parts of the shape. |
| 12.8 | Equal or Unequal Parts | 1.G.3 MP 1 MP 3 MP 6 Companion Pg. 182 | How can you identify equal and unequal parts in two-dimensional shapes? | The work of decomposing shapes leads naturally to considering whether the decomposed parts are equal or unequal. A real-life situation for this concept is sharing food. Deciding whether a shape (or a whole) has been partitioned into equal or unequal parts is the beginning of children's experience with fractions. | Math Board, two-dimensional shapes | Build a model shape. Have students try to construct the same shape you have composed with two-dimensional blocks. Students pair share their findings. | equal parts, equal shares, unequal parts, unequal shares | Children read the book and identify the shapes of signs. | Draw two rectangles. Draw lines on one rectangle to show equal parts. Draw lines on the other rectangle to show unequal parts. |

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| 12.9 | Halves | 1.G.3 MP 1 MP 4 MP 6 Companion Pg. 182 | How can a shape be separated into two equal shares? | This lesson builds on the important concepts of equal and unequal parts by introducing a kind of equal part-the half. But for children to understand halves, they must understand that a shape in itself is a whole. When a whole has two equal parts, these equal parts are called halves. | Math Board, 8 1/2x11 paper for each student | Have students identify shapes with equal and unequal parts. What makes the parts equal? What makes the parts unequal? Explain. Challenge students to fold a piece of paper in 2 equal parts. | half of, halves | | Draw a circle and separate it into halves. Color each half a different color. |
| 12.10 | Fourths | 1.G.3 MP 1 MP 4 MP 6 Companion Pg. 182 | How can a shape be separated into four equal shares? | Some children may ask why it is important that the parts showing halves or fourths are equal parts or equal shares. Explain that equal parts or equal shares are important mathematical concepts that will help children when they learn more about fractions and division in later grades. Conceptually students need to understand that the more parts a shape is separated into the smaller the pieces and the less parts a shape is separated into the larger the pieces. | Math Board, 8 1/2x11 paper for each student | Review that two equal parts are referred to as halves. Use the sandwich to discuss equal shares. Today challenge your students to separate a piece of paper into four equal parts. Sandwich | fourth of, fourth, quarter of, quarters | | Draw two squares. Draw lines to show fourths. Color a fourth of the first square. Color the second square to show a whole. |

Assessments:

Go Math [Chapter 12 Test](#)

Go Math Chapter 12 Performance Task [Shape Up!](#)

****Common Assignment** Critical Area Performance Task [Shelby's Shapes](#)