

Grade 1	Lesson: 15-2 Problem Solving: Make an Organized List	Reference to English
Math Standard(s): 1.G.2		Domain: Geometry
Content Objective(s):		Language Objective(s):
Students will solve addition problems by recognizing and recording its parts in small groups. <i>I can solve addition problems by recognizing and recording its parts with a small group.</i>		Students will speak the words inside, outside and in all while adding parts. <i>I can speak the words inside, outside and in all while adding parts.</i>
Essential Understanding: Some problems can be solved by generating a list of outcomes and organizing that list in a systematic way so all outcomes are accounted for.		Academic Vocabulary: Listen: Read: Write: Speak: Sentence Frame:
Materials: • Pattern blocks (teaching tool 16)		Language and Word Wall:
Lesson:		Instructional Time: 25 minutes
<p>Opening: (3 minutes)</p> <p>T: "You have learned how to name and describe plane shapes."</p> <ul style="list-style-type: none"> Go through the shapes with the class. <p>T: "Today you will learn how to make an organized list to show all of the different ways to make larger shapes by combining pattern blocks."</p> <p>T: "There are many shapes around us. Some objects are made up of 1 shape, some are made up of 2 or 3 shapes. Let's look around the room and find an object that is made up of 2 or more shapes."</p> <p><i>S: will look around the room and try to find an object that is made up of 2 or more shapes.</i></p> <p>T: "Tell your neighbor the object you found that is made up of 2 or more shapes."</p> <p><i>S: will turn to their neighbor and tell them the objects.</i></p> <p>T: "Let's make a list on the board of the objects we have found that have 2 or more shapes. I will start. Look at this chair. There are rectangles, squares, circles for the legs. I draw a chair on the board. Raise you hand and tell me more objects."</p> <p>Introduction to New Material (Direct Instruction): (3 minutes)</p> <ul style="list-style-type: none"> Use a document cam to show the pattern blocks. <p>T: "Let's look at pattern blocks. We have a hexagon, a rhombus and a triangle. What are different ways we can make a hexagon."</p> <p><i>S: will respond with different ways to make a hexagon.</i></p> <p>T: "One way we can make a hexagon is by taking 6 triangles and putting them together. I will organize them right on top of the hexagon to make sure the shape stays the same."</p> <ul style="list-style-type: none"> Teacher will go through other pattern blocks to make a hexagon. <p>T: "How many ways are there to make a hexagon?"</p> <p><i>S: will respond with the number of ways to make a hexagon with the other pattern blocks.</i></p> <p>Guided Practice: (7 minutes)</p> <p><u>Use the modeling cycle:</u></p> <p><u>Teacher Does:</u></p> <p>T: "I am not going to separate you into groups of 2. You need to find all the ways to make this shape using the yellow hexagon, blue rhombus and green triangle blocks."</p> <p><u>1 Students Does with Teacher:</u></p> <p>T: "I need one helper."</p> <ul style="list-style-type: none"> Teacher will choose a helper. Draw a shape on the board. <p>T: "Will you please find all the ways to make this shape with the yellow hexagon?"</p> <p><i>S: will find all the ways to make the shape with the yellow hexagon.</i></p> <p>T: "What shape is it?"</p> <p><i>S: will respond "it is a hexagon."</i></p> <p>T: "Good job, you found a way to make this shape using a hexagon."</p>		

All Students Do:

T: "Now I want all students to do it. Here are the groups of 2. You will need 1 paper for the whole group."

S: will collect their paper and as a group will find all the ways to make the shape on the paper.

Independent Practice: (5 minutes)

T: "Now it is your turn to do a problems on your own. Each of you will be given this paper and I expect you to answer all the questions. We will do the first one together."

- Use the document cam to show the question.

T: "Look at the large yellow triangle. Can you make that triangle using only trapezoids?"

S: will respond with "no"

T: "Can you make that triangle using only rhombus?"

S: will respond with "no"

T: "Can you make that triangle using only rhombus?"

S: will respond with "yes"

T: "Watch and count the number of small green triangles I use to make the big yellow one."

S: will count, 1,2,3,4.

T: "We used 4 triangles. Let's write this information down."

- Teacher will write the information on the paper.

T: "If we use 2 shapes to make the triangle, can one of them be a trapezoid and the other be a triangle?"

S: will respond, "yes"

T: "Let me show you."

T: "Can I make the triangle using a rhombus and 2 triangles?"

S: will respond, "yes" or "no"

T: "You can! Let me show you. We found 3 different ways to make the triangle."

T: "Now it is your turn. You will do questions number 2 on your own. Papers are on your table. When I call your row you may stand up, walk to your table and get started."

S: will begin working

- Make sure there are pattern blocks on every table.
- Teacher will walk around the room as students work.

Closing: (1 minutes)

T: "Good job today. You were able to make shapes using other shapes!"

Assessment:

Guided Practice