

Grade 1	Lesson: 15-9 Building with Solid Figures	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: Solid figures can be combined to make other solid figures.		Academic Vocabulary: Listen: Read: Write: Speak: Sentence Frame:
Materials: <ul style="list-style-type: none">Solid Figures (Teaching Tool 19)Pattern Blocks (teaching tool 16)		Language and Word Wall: pyramid
Lesson:		Instructional Time: 25 minutes
<p>Opening: (2 minutes)</p> <p>T: "You have learned how to build plane shapes. Remember when we put plane shapes together to make a house, like this."</p> <ul style="list-style-type: none">Draw a house using plane figures on the board. <p>T: "What shapes did I use?"</p> <p><i>S: will respond, "triangle, square..."</i></p> <p>T: "Today we are going to practice building with solid figures."</p> <p>Introduction to New Material (Direct Instruction): (4 minutes)</p> <p>T: "Look at this cube and this cone. What do you think we will have if we put the two together? I need a student to come up and put the cube and the cone together."</p> <ul style="list-style-type: none">Teacher will pick a student to come up and put the cube and cone together.Have a picture of a castle ready so the students know the what you are talking about. <p>T: "What does that look like? Does it look like a castle?"</p> <p><i>S: will respond, "yes"</i></p> <p>T: "Yes, when I put the cube and the cone together it looks like a castle."</p> <p>T: "I want to show you a new solid figure. (show the students a pyramid). This is a pyramid. Look at the pyramid and then describe it to your neighbor."</p> <p><i>S: will describe the pyramid to their neighbor.</i></p> <p>T: "Raise your hand and tell me one thing about the pyramid."</p> <p><i>S: will raise their hands and say, "the pyramid has flat surfaces and vertices" or the pyramid is made up of triangles and a square"...</i></p> <p>T: "Yes, the pyramid has flat surfaces. How many? Show me with your fingers."</p> <p><i>S: will show the number of sides with their fingers.</i></p> <p>T: "Count with me, 1,2,3,4. The pyramid has 4 flat surfaces. How many vertices? Show me with your fingers."</p> <p><i>S: will show the number of vertices with their fingers."</i></p> <p>T: "Correct, the pyramid has 4 vertices. What can we make with a pyramid and a rectangular prism? I need a student to come up and make something with a pyramid and a rectangular prism."</p> <ul style="list-style-type: none">Teacher will choose a student. <p><i>S: will make an object with a pyramid and a rectangular prism.</i></p> <p>T: "What is it?"</p> <p><i>S: will respond.</i></p> <p>Guided Practice: (6 minutes)</p> <p><u>Use the modeling cycle:</u></p> <p><u>Teacher Does:</u></p> <p>T: "Now, I am to separate you into groups of 2. Each group will be given solid figures. You need to make as many objects with the solid figures as you can with your partner. Remember each object can only use 2 solid figures. I will walk around and ask you what you have made and the solid figures you have used. You will have 4 minutes."</p> <p>All Students Do:</p>		

T: "When I clap, that means it is time to clean up. Please put them back quickly so other can use them too."

S: will separate into pairs and do the activity.

- Walk around the classroom questioning the students.
- After 4 minutes bring the students back together.

Independent Practice: (5 minutes)

T: "Now it is time for you to answer some questions. We will do the first and the 4th together. You will do the rest on your own. I will read the questions and you will need to circle the correct answers."

T: "Look at question #1. Circle the two solid figures that make the object."

S: will circle the cube and the cone.

T: "Which solid figure did you circle. Tell you neighbor."

S: will turn to their neighbor and say with the teacher, "cube and cone"

T: "The cube and cone make the object. Let's move to questions #4. Look at the object. Write how may of each solid figure is used to make the object."

T: "Show me with your fingers, how may sphere are used in the object?"

S: will show 1 with their fingers.

T: "I will write 1 under the sphere. How many cylinders are used in the object? Show me with your fingers."

S: will show 0 with their fingers.

T: "I will write 0 under the cylinder. How many rectangular prisms are used in the object? Show me with your fingers."

S: will show 1 with their fingers.

T: "I will write 1 under the rectangular prism. How many cubes are used in the object? Show me with your fingers."

S: will show 1 with their fingers.

T: "I will write 1 under the cube."

T: "Good job, now it is your turn. The papers are on the table. You will have 3 minutes to finish."

- The teacher will call out the names of the students so they can go to their desks and answer the questions.

Closing: (3 minutes)

- Hand out white boards, markers and erasers.

T: "Now I am going to read the story problems. Draw the object as I read the story. Claire made an object using solid figures. She used 2 cylinders and 1 sphere. Draw a picture of what you think Claire made with those solid figures."

S: will draw and object with 2 cylinders and 1 sphere.

T: "Show me what you drew in 3,2,1. Those are great. You all drew an object with 2 cylinders and 1 sphere."

- Continue with questions 8-9 as a whole class.

T: "Good job today!"

Assessment:

Guided Practice