

Grade 1	Lesson: 15-8 Sorting Solid Figures	Reference to English
Math Standard(s): 1.G.1		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: Attributes can be used to sort solid figures. Many sets of solid figures can be sorted in more than one way.		Academic Vocabulary: Listen: Read: Write: Speak: Sentence Frame:
Materials: <ul style="list-style-type: none">Solid Figures (Teaching Tool 19)Marble, pencil box		Language and Word Wall:
Lesson:		Instructional Time: 25 – 30 minutes
<p>Opening: (1 minutes) T: “You have learned how to sort plane shapes based on their similarities and differences. Today you will learn how to sort solid figures based on how they are alike and different.”</p> <p>Introduction to New Material (Direct Instruction): (4 minutes) T: “Look at the cube. What does the cube have?” <i>S: will respond, “the cube has surfaces and vertices” or “the cube has 6 surfaces”</i> T: “Yes, the cubes have flat surfaces and vertices. What can you tell me about the cylinder?” <i>S: will respond, “the cylinder has no vertices and 2 flat surfaces.”</i> T: “Yes, the cylinder has 2 flat surfaces and no vertices. What do the cube and the cylinder have in common? Tell your neighbor.” <i>S: will tell their neighbor, “they both have flat surfaces.”</i> T: “Raise your hand and tell 1 thing the cube and cylinder have in common.” <i>S: will raise their hands and say “they both have flat surfaces.”</i> T: “Correct, they both have flat surfaces. What makes the cube and the cylinder different? Tell your neighbor.” <i>S: will turn to their neighbor and say, “the cylinder has zero vertices” or “the cube has 6 flat surfaces, the cylinder has 2”...</i> T: “Raise your hand and tell me what is different about the cube and cylinder.” <i>S: will raise their hands and say the differences between the cube and cylinder.</i> T: “Yes, the cube has 6 surface while the cylinder has 2, ...”</p> <p>Guided Practice: (8 minutes) <u>Use the modeling cycle:</u> Teacher Does: T: “Now, I am to separate you into groups of 2. You need to find 2 ways to sort the solid figures. I want you to sort them once and then raise your hand so I can see how you sort them. Then you will do again.” <ul style="list-style-type: none">Students should already know how to sort because they sorted the plane shapes in lesson 15-3. All Students Do: T: “Now I want every one to participate! I will separate you into groups of 2 and sort the solid figures. When I clap, that means it is time to clean up. Please put them back quickly so other can use them too.” <i>S: will separate into pairs and do the activity.</i> <ul style="list-style-type: none">Walk around the classroom to check how the students sort the solid figures.After 4 minutes bring the students back together. <p>Independent Practice: (5 minutes) T: “Now we are going to do the worksheet together. I will read the questions and you will need to circle the correct answers.” T: “Look at question #1. Which solid figure has flat surfaces, cannot roll? Circle the correct solid figure.” <i>S: will circle the cube.</i> T: “Which solid figure has 6 flat surface and cannot roll? Say it with me, cube.”</p> </p>		

S: *will say with the teacher, "cube"*

- Continue asking the rest of the questions the same way.

Closing: (3 minutes)

T: "Now I am going to read the story problems. Joan collects things that have no vertices. What solid figures have no vertices?"

- Show the students a marble and a pencil box.

S: *will respond, "sphere"*

T: "You're right, sphere do not have vertices. She found a marble and a pencil box. Which will she put in her collection? The marble or the pencil box?"

S: *will respond, "the marble"*

T: "She will put the marble in the collection because a marble does not have vertices."

- Continue with questions 11-13 as a whole class.

T: "Good job today!"

Assessment:

Guided Practice