

Name _____

Date _____

Grade 4, Unit 1: Naming and Constructing Geometric Figures

Study Guide


Dear Parents,



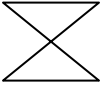
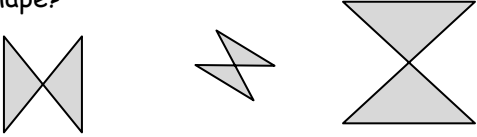
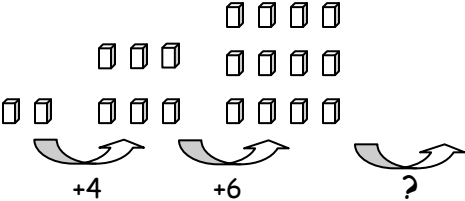
Listed below are the skills that the students will be responsible for in Unit 1. Remember, **Part B** skills are not expected to be mastered. There will be other opportunities for reinforcement and is not a part of your child's unit assessment grade. Students are expected to demonstrate understanding of the **Part A** skills and these are the basis of the unit assessment grade. As always, basic fact review is important.

*The following will help you to prepare for your unit assessment.

*As you work through this study guide, please write any questions down that you have and we will go over them the week of the test.

Part A Skills

Outcome	Example	Practice Opportunities/Resources
Sketch acute, right, and obtuse angles; parallel and intersecting line segments, lines, and rays; and polygons given their names or descriptions	Use a straight edge to draw a quadrangle that has 4 right angles. OR Use a straight edge to draw AB and CD.  Draw each so they intersect one another.	<i>Journal p.</i> 4, 5(#2), 6, 9(#2), 10, 11, 13(#2,3,4), 16(#3,5), 20(#2,3), 26(#3,5) <i>SRB p</i> 90-95, 97 <i>Study Link</i> 1.2, 1.3, 1.4, 1.5
Identify or describe quadrilaterals (quadrangles)	Identify the quadrangle above.	<i>Journal p.</i> 10, 11, 20(#5), 26(#3) <i>SRB p.</i> 97, 99-100 <i>Study Link</i> 1.3, 1.4, 1.5, 1.6
Identify or name lines, line segments, and rays; parallel or intersecting lines, line segments, and rays; and triangles and quadrilaterals (quadrangles)	Name the line, line segment, and/ or ray to identify the picture. There may be more than one way to name the picture based on what you know about lines, rays, and line segments, points and endpoints.	<i>Journal p.</i> 4, 5(#2), 6, 9(#2), 10, 11, 16(#3,5), 20(#3,4), 25, 26(#3,5) <i>SRB p.</i> 90-95, 97 <i>Study Link</i> 1.2, 1.3, 1.4, 1.5
Identify or describe polygons	Identify shapes that are <u>not</u> polygons	<i>Journal p.</i> 10-12, 13(#6), 25, 26(#2) <i>SRB p.</i> 96-97 <i>Study Link</i> 1.5, 1.6 <i>Games:</i> Polygon Pair-Up (SRB p. 258)
Explain mathematical ideas in written form	Be able to explain why a shape is not a polygon	<i>Journal p.</i> 6, 12 <i>Study Link</i> 1.2, 1.4

<p>Generate a rule for a non-numeric growing pattern</p>	<p>Match the letter representation of the pattern with picture representation of the pattern</p> <p>Example not limited to: ABABAB</p> 	<p><i>SRB p.158-159</i></p>
<p>Represent and analyze numeric patterns using skip counting</p>	<p>The student should be able to skip count by any of the numbers 3,4,6,7,8, or 9 and be able to describe the pattern or find the next term if the pattern were to continue.</p> <p>Ex: What rule describe the pattern? 32, 36, 40, 44, 48, ...</p> <p>If the pattern were to continue, what would the 7th term be?</p>	<p><i>Journal p. 3(#2), 8(#2)</i></p>
<p>Identify and describe the results of translations (slides), reflections (flips), and rotations (turns).</p>	<p>Which picture shows a reflection?</p> 	<p><i>SRB p. 106-107</i></p>
<p>Identify and describe geometric figures as congruent. (Identify the result in a transformation as being congruent to the original figure.)</p>	<p>Look at this shape.</p>  <p>Which figure is congruent to the original shape?</p> 	<p><i>SRB p.105</i></p>
<p>Justify ideas or solutions with mathematical concepts or proofs</p>	<p>After solving a problem, explain how you solved and your answer is correct by using what you know about math to prove your solution.</p>	
<p>Generate a rule for the next level of a non-numeric growing pattern</p>	 <p>Look at the growing pattern.</p> <p>What is the next level of the growing pattern? (choose from 4 possible answers.)</p> <p>Use what you know about growing patterns to explain how you know.</p> <p>Look at the growing pattern. What rule describes the change from level to level?</p>	<p>Use pennies, or other common materials to build a physical model of a growing pattern play interactive games to see if the partner can figure out the rule for the growing pattern</p> <p><i>SRB p. 158-159</i></p>

<p>Demonstrate proficiency with addition and subtraction basic facts</p>	<p>Timed test of 16 addition and subtraction facts. Must be completed in 1 minute or 1 minute and 30 seconds. Focus on fact strategies of +8, +9; near doubles, -8, -9, think doubles.</p>	<p><i>Journal p.</i> 3(#1,5), 5(#1,5), 7, 8(1,5), 9(#1,5), 13(#1), 16(#1), 20(#1), 26(#1) <i>Study Link</i> 1.2, 1.4, 1.5, 1.6, 1.7, 1.8 <i>Games:</i> Addition/Subtraction Top-It (SRB p. 263)</p> <p>Students may also use their fact triangles to practice facts.</p>
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Part B Skills: These skills are **NOT** expected to be mastered for this assessment.

- Use inductive or deductive reasoning.
- Identify, describe, and draw angles, parallel line segments, and perpendicular line segments.
- Identify, describe, or draw a polygon.
- Identify geometric figures as similar.
- Identify geometric figures as congruent.