

Process Standards Rubric

Geometry

Expectations Instructional programs from pre-kindergarten through grade 12 should enable all students to:		Exercise															Drill Sheet 1	Drill Sheet 2	Review	Review	Review	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15						
GOAL 1: Problem Solving	<ul style="list-style-type: none"> build new mathematical knowledge through problem solving; solve problems that arise in mathematics and in other contexts; apply and adapt a variety of appropriate strategies to solve problems; monitor and reflect on the process of mathematical problem solving. 	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GOAL 2: Reasoning & Proof	<ul style="list-style-type: none"> recognize reasoning and proof as fundamental aspects of mathematics; make and investigate mathematical conjectures; develop and evaluate mathematical arguments and proofs; select and use various types of reasoning and methods of proof. 	✓		✓					✓	✓												
GOAL 3: Communication	<ul style="list-style-type: none"> organize and consolidate their mathematical thinking through communication; communicate their mathematical thinking coherently and clearly to peers, teachers, and others; analyze and evaluate the mathematical thinking and strategies of others; use the language of mathematics to express mathematical ideas precisely. 	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GOAL 4: Connections	<ul style="list-style-type: none"> recognize and use connections among mathematical ideas; understand how mathematical ideas interconnect and build on one another to produce a coherent whole; recognize and apply mathematics in contexts outside of mathematics. 	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GOAL 5: Representation	<ul style="list-style-type: none"> create and use representations to organize, record, and communicate mathematical ideas; select, apply, and translate among mathematical representations to solve problems; use representations to model and interpret physical, social, and mathematical phenomena. 	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓



Task Sheet 1

- 1) As Anna looks around her playroom, she sees many different shapes. Some of the shapes have zero sides. Some of the shapes have three or more sides. What shapes can be found in Anna's playroom?



SAMPLE

Reflection

Explain how Anna might want to sort the shapes she sees. What would each group of shapes have in common?

NAME: _____



Drill Sheet 2

2) Count the number of faces, sides and vertices (corners) on each shape



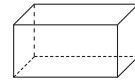
a) Pyramid

_____ faces
_____ sides
_____ vertices



b) Cube

_____ faces
_____ sides
_____ vertices



c) Prism

_____ faces
_____ sides
_____ vertices

Where is each shape located?



- d) The square is _____ to the circle.
- e) The triangle is _____ the circle and the rectangle.
- f) The rectangle is _____.
- g) Draw the following: A circle on top of a square. The circle is in between a triangle and a rectangle.

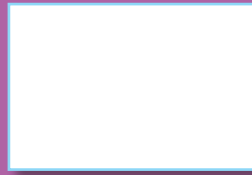


Flips, Slides and Turns

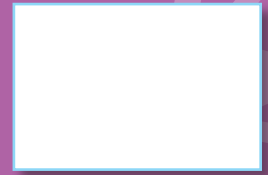


Draw the flip, slide or turn for each shape.

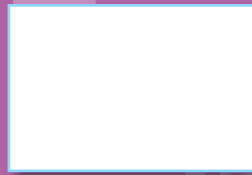
a) Flip:



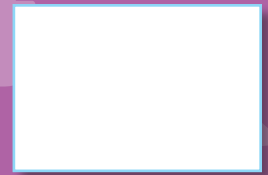
h) Turn:



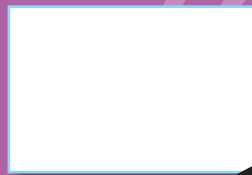
b) Slide:



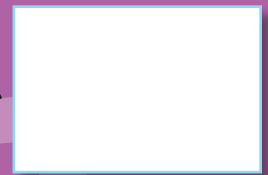
i) Turn:



c) Flip:



j) Flip:



d) Turn:



k) Turn:



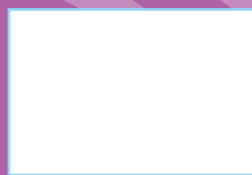
e) Flip:



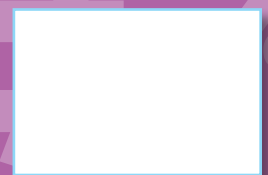
l) Flip:



f) Turn:



m) Flip:



g) Slide:



n) Turn:



SAMPLE