

# NCTM Process Standards Rubric



## Geometry – Drill sheets

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

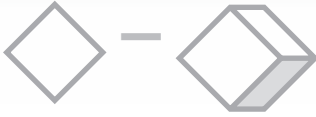
SAMPLE

NAME: \_\_\_\_\_

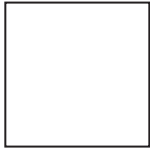


**15a) Match each plane shape on the left to its solid shape on the right.**

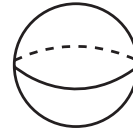
Ex:



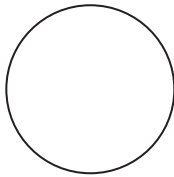
1.



5.



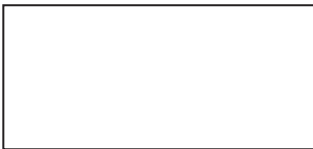
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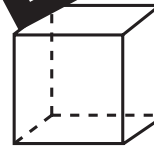
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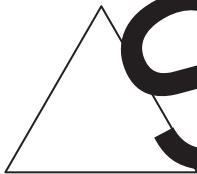
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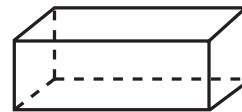
7.



4.



8.



**SAMPLE**

b) Which solid shape can roll? \_\_\_\_\_

c) Which solid shapes can be stacked? \_\_\_\_\_

d) Which two solid shapes have the same number of corners?  
\_\_\_\_\_ and \_\_\_\_\_

e) Which solid shape is made with only squares? \_\_\_\_\_

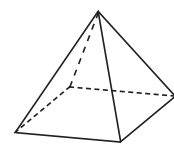
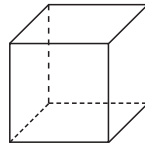
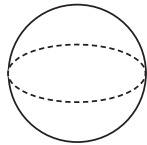
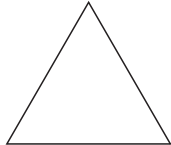
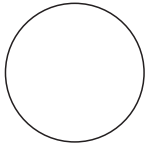
f) Which solid shape has five faces? \_\_\_\_\_

g) Which solid shape has no edges? \_\_\_\_\_



# Review C

a) Find the position of each shape in the pattern below.



1) What shape is **second**?

1. circle

2. square

3. triangle

2) What shape is **fifth**?

1. square

2. triangle

3. cube

3) What shape is **in between** the sphere and the square?

1. triangle

2. circle

3. cube

4) What shape is **before** the sphere?

1. triangle

2. circle

3. cube

b) What shape has six sides? \_\_\_\_\_

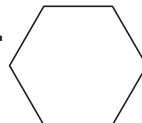
1.



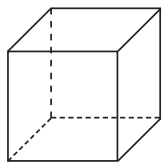
2.



3.



c) How many corners are on a cube? \_\_\_\_\_

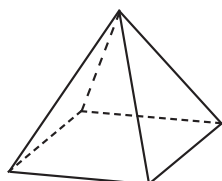


1. 6

2. 8

3. 10

d) How many faces on a pyramid? \_\_\_\_\_



1. 5

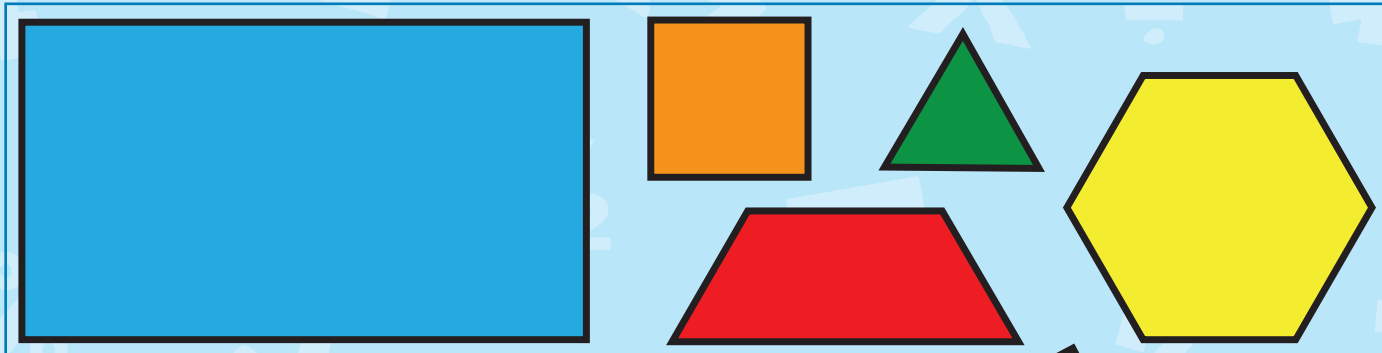
2. 7

3. 8

# Shapes



Using pattern blocks, how many different shapes can you make?



SAMPLE