Mathematics Grade 7
Classroom Assessment Based on Standards (MMP 7/06)

MPS Learning Target – Measurement

- Identify and describe polyhedra from multiple perspectives and determine the measure of angles and angle pairs in polygons.
- Design and classify symmetrical figures, transform points and figures using the coordinate plane, and apply properties of similarity in problem solving situations.

1.) For each of the figures below, the lengths of 3 sides are given. Which figure could have a perimeter of 28?

A. [Diagram A]

B. [Diagram B]

C. [Diagram C]

D. [Diagram D]

E. [Diagram E]

Answer ____________________
1b.) Find the area of this figure.

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8
7
4
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Area __________

3.) Use your protractor to find the degree measure of the angle shown below. Answer______

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4.
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4.)

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\[
\text{Evil Sea}
\]
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\[
\square = 1 \text{ mi}^2
\]

Estimate the area of the Evil Sea when 1 square unit is equal to 1 square mile.

Area ________________
5.)

John and Rob had plans to ride their bikes to the park. John followed the path to Rob’s house and together they rode to the park along the path. Measure each segment to find out how far the boys rode their bikes.

a.) How far is John’s house from Rob’s house? _______________

b.) How far is Rob’s house from the park? _______________

c.) How far did John ride his bike? _____________________

6.) How many 100 yard football fields do you have to run (in a straight line) to run a mile?  
   * (5280 ft = 1 mile) 
   Answer _____________________

7.) If the area of the shaded triangle is 4 square inches, what is the area of the entire square?

A. 4 square inches  
B. 8 square inches  
C. 12 square inches  
D. 16 square inches  
E. Not enough information given
8.) Scale the figure below by a factor of 2 on the larger grid.
9.) Mary lives in City ‘C’. Bob lives in City ‘B’. Bob and Mary are working in city ‘A’. After work, Bob drives Mary home and then goes home himself. If he is driving 60mph, how long will the whole trip take?

Answer ________________

Explain your answer.
10.) Use your ruler to measure the sides of triangle A. Then draw a triangle inside the box that is 3 times larger than triangle A. Remember to label the sides of both triangles with the measurement found.
11.) This triangle is the triangular face of the following square based pyramid (pictured in 11a.)

Height = 7 in.

11a.) Determine the surface area of this square based pyramid.

5 in.  

A = ______________

Show all of your work.