**NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Updated 2013

**This part is due on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Creature Feature: Triangles**

**Assignment 4** (Remember you may use a calculator, but must show your proportions equations!)

**This assignment does not require building.**

1. Add 3 different types of triangles on the torso of your creature.
2. Use your scale factor and proportions to determine the size of the triangles on your drawing. Do this on your scale calculation sheet. Draw them to scale on your graph paper. They do not need to be 3-D.

3) Label the type of triangle, by its sides and its angles, on each triangle on

 your scale drawing. Sides: isosceles, scalene, equilateral.

 Angles: right, obtuse, acute.

4) Find the perimeters of the 3 triangles on your graph paper (scale

 drawing). Show the calculations for the perimeters on the calculation

 sheet. Round to the nearest ¼ inch.

5) Find the areas of the 3 triangles on your graph paper (scale drawing).

 Show the calculations for each area on the calculation sheet. Round to the thousandths.

6) Measure the 9 angles of the triangles on your graph paper with a

 protractor. Clearly write each measurement at its angle on the graph

 paper.

7) Label the type of angle on all 9 angles on your graph paper.

 Example: obtuse, acute, right. Abbreviate with O, A, R.

****8) Upload a new picture of your creature which shows the triangles on your creature to your class’ picture diary. Insert a new slide under your existing slide. You can do this by going to “insert” and clicking on new slide. You will have to change the background. You can design your slide this time.

**RUBRIC: Assignment 4: 30 points**

**Check off each step as you complete it.**

\_\_\_\_\_\_\_\_\_\_\_Addition of 3 different types of triangles (do not need to be 3 – D on your creature). (3 pts)

\_\_\_\_\_\_\_\_\_\_\_ Calculations for scaling triangles included and accurate. (3 pts)

\_\_\_\_\_\_\_\_\_\_\_ Triangles drawn on graph paper in the correct size. (3 pts)

\_\_\_\_\_\_\_\_\_\_\_Types of triangles labeled on your drawing. (example: isosceles triangle). (3 pts)

\_\_\_\_\_\_\_\_\_\_ Perimeters of the 3 triangles on your graph paper. Use your drawing to determine the perimeters. You must show your work on your calculation sheet. (3 pts)

\_\_\_\_\_\_\_\_\_\_ Areas of the 3 triangles on your graph paper. Use your drawing to determine the

 perimeters. You must show our work on your calculation sheet. (3pts)

\_\_\_\_\_\_\_\_\_\_ Measurement of the 9 angles of the triangles on your graph paper. The measurements need to be written clearly on the graph paper. (3 pts)

\_\_\_\_\_\_\_\_\_\_ Angles labeled on the graph paper as to type. (Example: obtuse). (3 pts)

\_\_\_\_\_\_\_\_\_\_ Photo uploaded to photo diary. Add a new slide under your existing slide, including highlights and hardships. (2 pts)

\_\_\_\_\_\_\_\_\_\_ Neatness (2 pts)

\_\_\_\_\_\_\_\_\_\_ Creativity, Effort (2 pts)

CALCULATIONS:

ASSIGNMENT # 4

Use this paper to show all of your proportions. Label them so it will be easy to correct.

**My scale is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |
| --- | --- |
| **Triangle 1****Shape on my graph paper is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Scale calculations:****Perimeter:****Area:** | **Triangle 2****Shape on my graph paper is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Scale calculations:****Perimeter:****Area:** |
| **Triangle 3****Shape on my graph paper is: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_****Scale calculations:****Perimeter:****Area:** | **All other calculations for assignment 3 should be added directly on the graph paper.** |