Name: _____

Surface Area and Volume Print Activity

Use the "Explore It" mode to answer the following questions:

1. Match the shape to its name:

a.		_____ Triangular Prism
b.		_____ Rectangular Pyramid
c.		_____ Cylinder
d.		_____ Rectangular Prism
e.		_____ Cone
f.		_____ Triangular Pyramid

2. Match the shapes to their properties:

a.		The shapes that have circular bases are _____ and _____.
b.		
c.		The shapes that have rectangular bases are _____ and _____.
d.		The shapes that have triangular bases are _____ and _____
e.		
f.		

3. Select **Reset.**

   a. The shape displayed on both sides of the screen is called a _____.

   b. The formula beneath each shape is for the _____ (surface area/volume).

   c. The formula stated in words is V = _____ × _____.

   d. The formula stated in variables is ___ = (___)(___)(___).

   e. In this example each side measures ___ m.

   f. The volume of the shape is ___ m^3.

   g. Change the setting to **Surface Area.** This shape has _____ (4/6/8) surfaces and the SA is _____ m^2.

4. Select **Reset, Rectangular Prism,** and **Rectangular Pyramid.**

   a. The base of both shapes is a _____ whose area formula is A = _____.

   b. The volume formula for the prism is V = lwh and the volume is V = _____ m^3.

   c. The volume formula for the pyramid is V = _____ and the volume is V = _____ m^3.

   d. Select **Surface Area** for each shape.

      i. The prism is made up of ___ (4/5/6) rectangular surfaces and has a surface area of ___ m^2.

      ii. The pyramid is made up of ___ (1/2/3) rectangular and ___ (4/5/6) triangular surfaces and has a surface area of ___ m^2.

5. Select **Reset, Triangular Prism,** and **Triangular Pyramid.**

   a. The base of both shapes is a _____ whose area formula is A = _____.

   b. The volume formula for the prism is $V = \frac{1}{2}abh$ and the volume is V = _____ m^3.

   c. The volume formula for the pyramid is V = _____ and the volume is V = _____ m^3.

   d. Select **Surface Area** for each shape.

      i. The prism is made up of ___ (1/2/3) triangular surfaces, ___ (1/2/3) rectangular surfaces, and its surface area is _____ m^2

      ii. The pyramid is made up of ___ (4/5/6) triangular surfaces, and its surface area is _____ m^2.

6. Select **Reset, Cylinder, and Cone.**

   a. The base of both shapes is a _____ whose area formula is A = _____.

   b. The volume formula for the cylinder is V = _____ and the volume is V = _____ m^3.

   c. The volume formula for the cone is V = _____ and the volume is V = _____ m^3.

   d. Select **Surface Area** for each shape. The resulting surface area of the cylinder is _____ m^2 and for the cone is _____ m^2.