







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.  The shapes that have rectangular bases are \_\_\_\_\_ and \_\_\_\_\_.
- c.  The shapes that have triangular bases are \_\_\_\_\_ and \_\_\_\_\_.
- d.  \_\_\_\_\_
- 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  $V = \text{_____} \times \text{_____}$ .
- d. The formula stated in variables is  $V = (\text{_____})(\text{_____})(\text{_____})$ .
- e. In this example each side measures \_\_\_\_\_ m.
- f. The volume of the shape is \_\_\_\_\_  $\text{m}^3$ .
- g. Change the setting to Surface Area. This shape has \_\_\_\_\_ surfaces and the SA is \_\_\_\_\_  $\text{m}^2$ . (4/6/8)

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

- a. The base of both shapes is a \_\_\_\_\_ whose area formula is  $A = \text{_____}$ .
- b. The volume formula for the prism is  $V = lwh$  and the volume is  $V = \text{_____} \text{m}^3$ .
- c. The volume formula for the pyramid is  $V = \text{_____}$  and the volume is  $V = \text{_____} \text{m}^3$ .

d. Select Surface Area for each shape.

- i. The prism is made up of \_\_\_\_\_ rectangular surfaces and has a surface area of \_\_\_\_\_  $\text{m}^2$ . (4/5/6)
- ii. The pyramid is made up of \_\_\_\_\_ rectangular and \_\_\_\_\_ triangular surfaces and has a surface area of \_\_\_\_\_  $\text{m}^2$ . (1/2/3) (4/5/6)

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

- a. The base of both shapes is a \_\_\_\_\_ whose area formula is  $A = \text{_____}$ .
- b. The volume formula for the prism is  $V = \frac{1}{2}abh$  and the volume is  $V = \text{_____} \text{m}^3$ .
- c. The volume formula for the pyramid is  $V = \text{_____}$  and the volume is  $V = \text{_____} \text{m}^3$ .

d. Select Surface Area for each shape.

- i. The prism is made up of \_\_\_\_\_ triangular surfaces, \_\_\_\_\_ rectangular surfaces, and its surface area is \_\_\_\_\_  $\text{m}^2$ . (1/2/3) (1/2/3)
- ii. The pyramid is made up of \_\_\_\_\_ triangular surfaces, and its surface area is \_\_\_\_\_  $\text{m}^2$ . (4/5/6)

6. Select Reset, Cylinder, and Cone.

- a. The base of both shapes is a \_\_\_\_\_ whose area formula is  $A = \text{_____}$ .
- b. The volume formula for the cylinder is  $V = \text{_____}$  and the volume is  $V = \text{_____} \text{m}^3$ .
- c. The volume formula for the cone is  $V = \text{_____}$  and the volume is  $V = \text{_____} \text{m}^3$ .
- d. Select Surface Area for each shape. The resulting surface area of the cylinder is \_\_\_\_\_  $\text{m}^2$  and for the cone is \_\_\_\_\_  $\text{m}^2$ .