

PLAY-DOH LAB

- Use cm. for all measurements
- Measure to nearest tenth
- Round work and answers to nearest hundredth (each step)
- l = length, w = width, h = height
- Use 3.14 for π .

Name _____

RIGHT RECTANGULAR PRISM (NOT A CUBE)

- 1) Build the rectangular prism.
- 2) Draw and label side lengths.
- 3) Count faces, edges, vertices:
F = _____, E = _____, V = _____
- 4) Determine SA and Volume of your figure. Use the formulas:
 $SA = 2(lw) + 2(lh) + 2(wh)$
 $V = lwh$
- 5) Hold your dental floss VERY tightly and cut cross sections. Then tell what shape is created by each type of cross section:
Vertical: _____ Horizontal: _____ Angled: _____

RIGHT RECTANGULAR PRISM (CUBE)

- 1) Build the rectangular prism.
- 2) Draw and label side lengths on your drawing.
- 3) Count faces, edges, vertices:
F = _____, E = _____, V = _____
- 4) Determine SA and Volume of your figure. Use the formulas:
 $SA = 2(lw) + 2(lh) + 2(wh)$
 $V = lwh$
- 5) Hold your dental floss VERY tightly and cut cross sections. Then tell what shape is created by each type of cross section:
Vertical: _____ Horizontal: _____ Angled: _____

SPHERE

- 1) Build the sphere.
- 2) Hold your dental floss VERY tightly and cut cross sections and tell what shape is created: _____
- 3) Find the diameter (d) of the cross-section: _____ Is this the diameter of your sphere? _____
Find the radius (r) of the cross-section: _____ Is this the radius of your sphere? _____
- 4) Calculate the circumference of your cross section: _____
Is this the circumference of your sphere? _____
- 5) Determine the surface area and volume of your sphere. Use the formulas:
 $SA = 4\pi r^2$ $V = \frac{4}{3}\pi r^3$

RIGHT RECTANGULAR PYRAMID

- 1) Build a rectangular pyramid.
- 2) Draw and label side lengths on your drawing.
- 3) Count faces, edges, vertices:
F = _____, E = _____, V = _____
- 4) Hold your dental floss VERY tightly and cut cross sections. Then tell what shape is created by each type of cross section:
Vertical: _____ Horizontal: _____ Angled: _____