Geometry

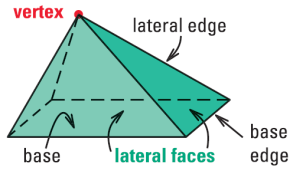
12.3 Surface Area of Pyramids and Cones

# Pyramids

vertex

* All faces except one intersect at one point called **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

base



vertex

Lateral edge

Lateral faces

base

Base edge

* The **\_\_\_\_\_\_\_\_\_\_\_** is the face that does not intersect at the vertex

Lateral faces

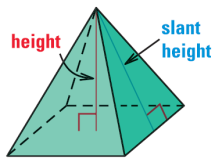
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are faces that meet in the vertex

Lateral edges

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are edges that meet in the vertex

Altitude

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is a segment that goes from the vertex and is perpendicular to the base



altitude

Slant height

**Regular Pyramid**

Regular polygon

* Base is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

center of the base

* The vertex is directly above the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

congruent isosceles triangles

* In a regular pyramid, all the lateral faces are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

slant height

* The height of each lateral face is called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(ℓ)

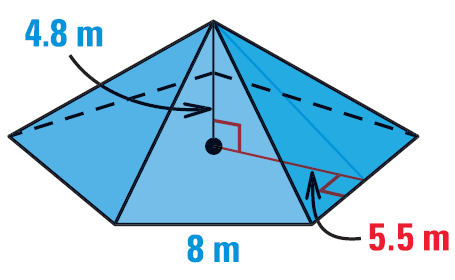
**Lateral Area**

½ Pℓ

* L = \_\_\_\_\_\_\_\_\_\_\_\_\_

## Surface Area of a Regular Pyramid

Where B = base area, P = base perimeter, ℓ = slant height

Find the surface area of the regular pentagonal pyramid.

# Cones

circle

* Cones are just like pyramids except the base is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

πrℓ

* Lateral Area = \_\_\_\_\_\_\_\_\_\_\_\_

## Surface Area of a Right Cone

Where r = base radius, ℓ = slant height

The So-Good Ice Cream Company makes Cluster Cones. For packaging, they must cover each cone with paper. If the diameter of the top of each cone is 6 cm and its slant height is 15 cm, what is the area of the paper necessary to cover one cone?

Looking for lateral area

814 #2-32 even, 35-39 all = 21

Extra Credit 817 #2, 6 = +2