

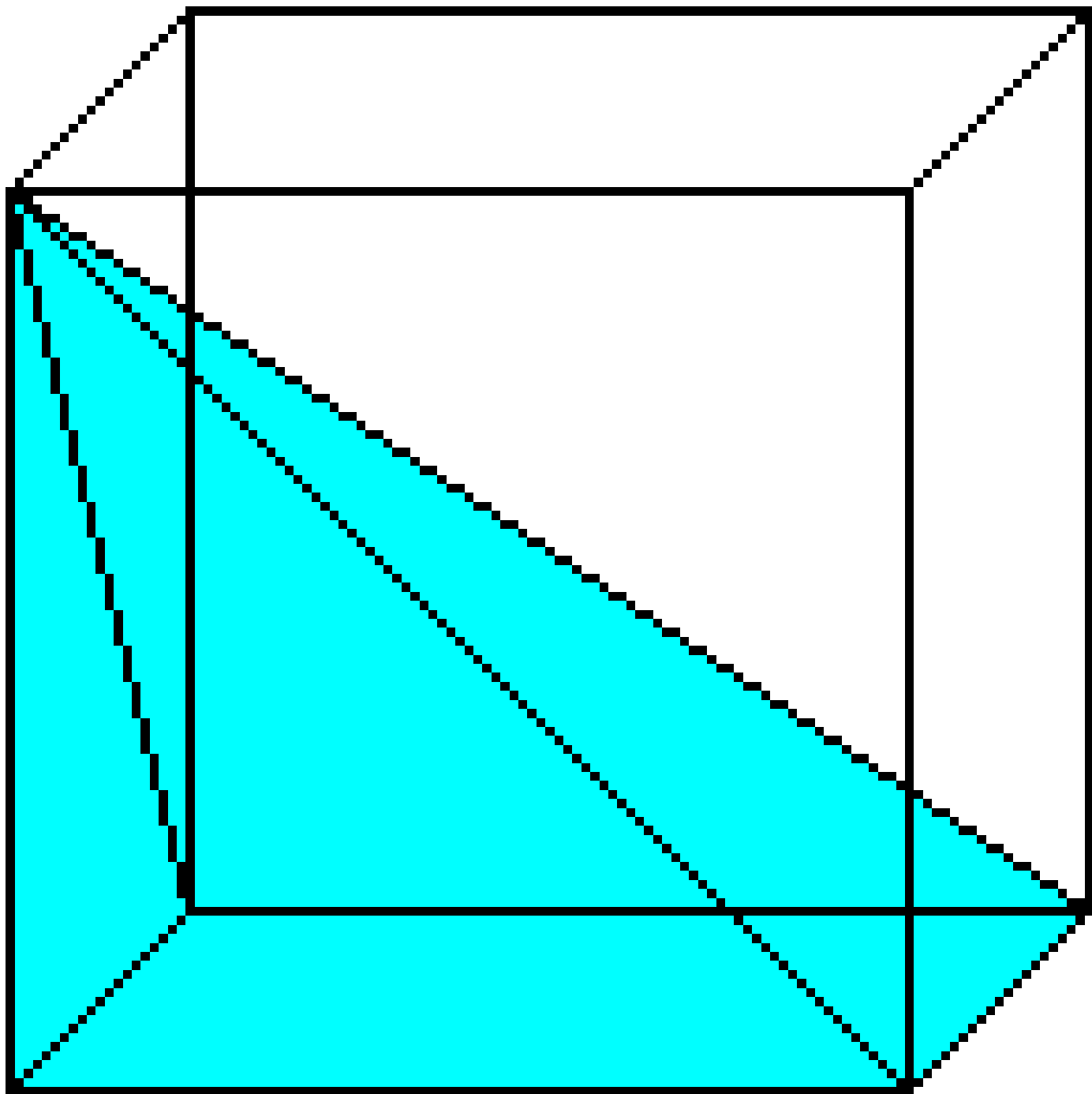
Do Now

We learned that the volume of any prism or cylinder is equal to the area of the base multiplied by the height (the perpendicular distance between the bases).

Consider some of the pyramids, or the cone, in your set of nets. How do you think the volume of the pentagonal pyramid, for example, compares to the volume of the pentagonal prism?

How do you think the volume of the cone compares to the volume of the cylinder?





Volume is the number of cubic units contained in a three-dimensional figure.

Volume of a Pyramid or Cone

$$V = \frac{1}{3} \cdot B \cdot h$$

where B is the area of the base and h is the height

You can use this formula to find the volume of any pyramid or cone.

Remember your area formulas for different shapes:

**Formulas: Triangle Area = $\frac{1}{2}bh$ Parallelogram Area = bh Trapezoid area = $\frac{1}{2}(b_1+b_2)h$
Circumference = πd Circle Area = πr^2 $\pi \approx 3.14$ for rough estimates: $\pi \approx 3$**

