

### Volume Circuit Cards

Cut along the dotted lines.

21

---

A rectangular bird food container has 3 inches of bird food in the container, as shown below.

What is the approximate volume in cubic inches of the bird food in the container?

18.75

---

A triangular pyramid and a triangular prism have the same length, width, and height. If the volume of the triangular prism is 270 cubic centimeters, what is the volume of the triangular pyramid in cubic centimeters?

225

---

Furniture Plus delivered a box that is 60 inches long, 18 inches wide, and 30 inches high. What is the volume of the box in cubic feet?

33.6

---

James is building a clay model of a Pyramid from Egypt for his history project.

What is the volume of the model in cubic units?

30

---

A rectangular pyramid and a rectangular prism have the same length, width, and height. If the volume of the rectangular pyramid is 75 cubic centimeters, what is the volume of the rectangular prism in cubic centimeters?

7.5

---

The tissue box is in the shape of a triangular pyramid. The height of the box is 5 inches. The area of the base is 12.6 square inches.

What is the volume of the tissue box rounded to the nearest cubic inch?

90

---

The volume of the triangular prism below is 30 cubic units.

What is the area of the base in square units?

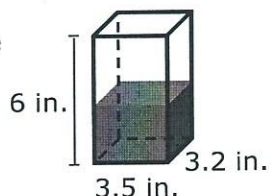
## Volume Circuit Cards With Hints\*

Cut along the dotted lines.

21

A rectangular bird food container has 3 inches of bird food in the container, as shown below.

What is the approximate volume in cubic inches of the bird food in the container?



Hint

Are you trying to find the volume of the entire container or the volume of the bird seed contained in the food container?

Is there any extra information?

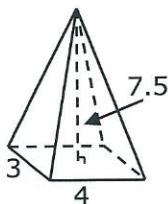
What shape is the base?

What is the formula for the Area of the Base?

33.6

James is building a clay model of a Pyramid from Egypt for his history project.

What is the volume of the model in cubic units?



Hint

Use your formula chart to help you.

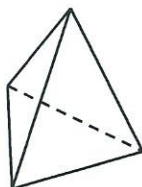
What is the shape of the base?

Do not forget to multiply by  $\frac{1}{3}$  or divide by 3.

7.5

The tissue box is in the shape of a triangular pyramid. The height of the box is 5 inches. The area of the base is 12.6 square inches.

What is the volume of the tissue box rounded to the nearest cubic inch?



Hint

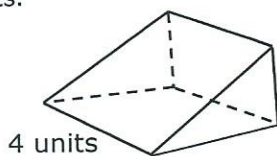
Use your formula chart to help you.

What is the shape of the base?

Do not forget to multiply by  $\frac{1}{3}$  or divide by 3.

90

The volume of the triangular prism below is 30 cubic units.



What is the area of the base in square units?

Hint

$$V = Bh$$

What pieces of information do you have?  
What pieces are missing?

Substitute the given information into the formula and isolate the variable.

18.75

A triangular pyramid and a triangular prism have the same length, width, and height. If the volume of the triangular prism is 270 cubic centimeters, what is the volume of the triangular pyramid in cubic centimeters?

Hint

Sketch a picture of the pyramid and the prism and estimate which figure would have a greater volume.

For which figure is the volume given? Label the correct figure with the volume.

What is the relationship between a prism and a pyramid that have congruent bases and the same height?

225

Furniture Plus delivered a box that is 60 inches long, 18 inches wide and 30 inches high. What is the volume of the box in cubic feet?

Hint

What unit of measure must you use for the answer?

What is the relationship between feet and inches?

Should you convert from inches to feet before or after you calculate the volume?

30

A rectangular pyramid and a rectangular prism have the same length, width, and height. If the volume of the rectangular pyramid is 75 cubic centimeters, what is the volume of the rectangular prism in cubic centimeters?

Hint

Sketch a picture of the pyramid and the prism and estimate which figure would have a greater volume.

For which figure is the volume given? Label the correct figure with the volume.

What is the relationship between a prism and a pyramid that have congruent bases and the same height?