

Name: _____ Date: _____

Finding The Volume of A Cube

Say It! Write It! Repeat It!

A) What is the volume of a **right** cube that is 3 in. high?

The key word to this problem is **cube**. It means that all the sides are the **same**.

To find the volume of a cube you multiply the area of the base (side x side) times the height. So it would look like:

(sxs)h - OR- (area of base) height

Because the height in this equation is the same as all the other sides we can write it like this:

$$(sxs)s = s \times s \times s = s^3$$

So this is how we would work the problem:

$$3 \times 3^2 = 3^3$$

$$3 \times \underline{\quad} = \underline{\quad} \text{ in.}$$

B) What is the volume of a **right** cube that is 4 in. high?

Since this is a cube each side will be 4 in.

$$4 \times 4^2 = 4^3$$

$$4 \times \underline{\quad} = \underline{\quad} \text{ in.}$$

C) What is the volume of a **right** cube that is 5 in. high?

Since this is a cube each side will be 5 in.

$$5 \times 5^2 = 5^3$$

$$5 \times \underline{\quad} = \underline{\quad} \text{ in.}$$

D) What is the volume of a **right** cube that is 6 in. high?

Since this is a cube each side will be 6 in.

$$6 \times 6^2 = 6^3$$

$$6 \times \underline{\quad} = \underline{\quad} \text{ in.}$$