Volume Review

The **volume** of an object is the amount of space it takes up. A common metric unit of volume is the **cubic centimeter (cc)**, the volume of a cube that is one centimeter long on each side.



What is the total volume of these cubes?

A **milliliter (ml)** is another metric unit of volume. It is the same as 1 cubic centimeter.

A **liter (I)** is a metric unit used to measure the volume of larger objects. One liter holds 1000 milliliters; it also holds 1000 cubic centimeters.

We can estimate the volume of a rock by making a model of the rock using centimeter connecting cubes and counting the cubes.

I. Estimate the volume of the rock in the picture by counting the cubes.





Measuring Volume by Displacement

We can also measure the volume of an object using a graduated cylinder. This method is called **measuring volume by displacement** because you find out how much water the object displaces or pushes away.

- 2. Look carefully at the scale of the graduated cylinder before the cubes are added.
 - A. How much water is in this graduated cylinder?
 - B. How much water did the cubes displace or push away?



Professor Peabody shows Jerome how to accurately measure the volume of the rock by displacement.



Jerome reads the graduated cylinder to check the water level. He tries to remember what he should do and what he should not do.

- 3. A. What should Jerome do?
 - B. What should Jerome not do?



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Jerome carefully added a rock to the graduated cylinder.



He then calculated the volume.



4. How can Jerome check the reasonableness of his volume measurement? [Hint: Use Question 1.]