

Name \_\_\_\_\_

## Reading a Graduated Cylinder

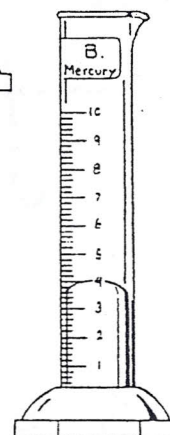
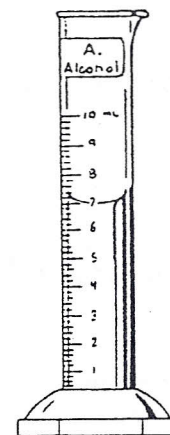
Liquids in graduated cylinders are measured in milliliters. One milliliter is  $1/1000$  of a liter.

When you are reading a graduated cylinder, there are two things you must watch for. The first is quite simple. Be sure that the cylinder is standing on a level surface and that you are looking at it at eye level. If you are standing above it or below it, your reading will not be accurate.

The second thing to watch for has to do with the characteristics of liquids. Some liquids, such as water, wet their containers. When the walls of the container are wetted, the surface of the liquid is slightly concave (curved downward).

Some other liquids, such as mercury, do not wet the walls of the container. In this case the curved line is slightly convex (curved upward).

The curved surface of a column of liquid is called the meniscus. The reading is always taken at the meniscus, not at the sides of the column.



1. What is the curved upper surface of a column of liquid called? \_\_\_\_\_
2. Which way does the upper surface of the liquid curve when the liquid wets the walls of the container? Answer with both a word and a sketch. \_\_\_\_\_
3. Which way does the upper surface of a liquid curve when the liquid does not wet the walls of the container? Again answer with a word and a sketch. \_\_\_\_\_
4. How much liquid is in each of the graduated cylinders shown?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_