

Identifying Laboratory Equipment _____

Scientists use a variety of tools to explore the world around them. Tools are very important in the advancement of science. The type of tools scientists use depends on the problems they are trying to solve. A scientist may use something as simple as a metric ruler to measure the length of a leaf. At another time, the same scientist may use a complex computer to analyze large amounts of data concerning hundreds of leaves.

In this investigation, you will identify pieces of laboratory equipment likely to be found in a biology laboratory. You will also learn the function of each piece of laboratory equipment.

SAFETY

Handle all glassware carefully. Be careful when handling sharp instruments. Always handle the microscope with extreme care.

BEFORE WE BEGIN...

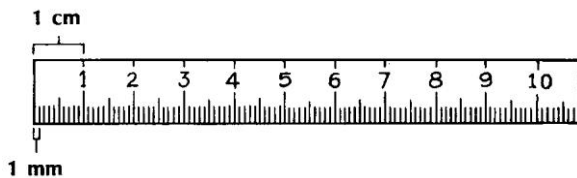
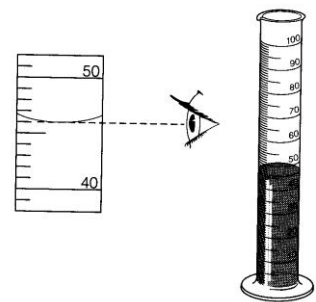
Do you remember this measuring tool and technique?

What is the tool called? _____.

It is used to measure the _____ of a _____.

It is properly read at the BOTTOM of the _____.

The measurement shown in the tube is _____ ml.



What is the name of this measuring tool?

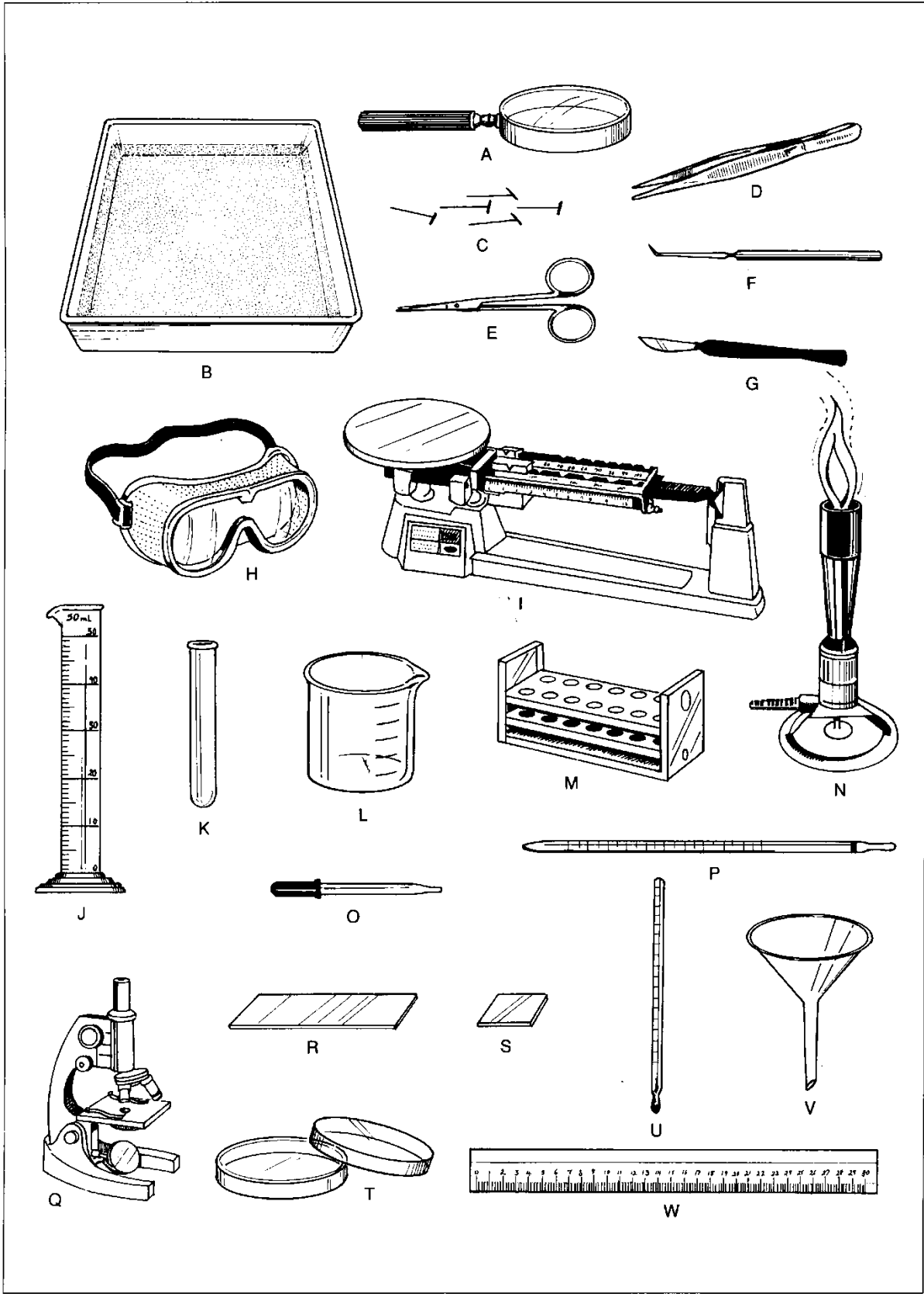
_____ cm = _____ mm

PROCEDURE

1. Look at the drawings of the laboratory equipment. Identify and label each piece. Use pencil.
2. In Observations, identify the function of each piece of laboratory equipment.

OBSERVATIONS - Identifying Laboratory Equipment

	Letter	Name of Equipment	Function of Equipment
1			Holds and accurately measures liquids.
2			Source of heat, uses gas.
3			Covers material on a glass slide to prevent drying.
4			Hold specimen on dissecting tray to prevent slipping.
5			Two crossed blades that open and close to cut a specimen to be studied.
6			Contains a specimen for dissection.
7			Accurately measures out drops of a liquid.
8			Grasps small objects.
9			Transfers liquid from one place to another, helps prevent spilling.
10			Holds liquids, has a large surface area for heating.
11			Magnifies small objects, extremely portable.
12			Makes an enlarged image of a very small object.
13			Provides a mounting surface for examination by microscope.
14			Shallow dish used for bacterial cultures.
15			Dispenses liquid drop by drop.
16			Pointed object used to examine specimens.
17			Measures length.
18			Protects eyes when using heat and chemicals.
19			Small, sharp knife used to dissect specimens.
20			Holds liquids, has a pouring spout.
21			Holds many test tubes.
22			Measures temperature.
23			Measures mass.



CONCLUSIONS

1. List four laboratory tools that are useful when magnifying small objects so they can be seen more easily.

2. List four laboratory tools that are useful when dissecting a frog.

3. What tool or tools would you use to make each of the following measurements most accurately?

_____ a. amount of milk in a small glass

_____ b. length of a sheet of paper

_____ c. temperature of a swimming pool

_____ d. mass of a baseball

ANALYSIS - Write in FULL sentences. Use a pen.

4. How do laboratory tools improve the observations made by a scientist?

GOING FURTHER

Examine other types of laboratory equipment that you will be using in the biology laboratory. Try to determine the function of each piece of equipment.