

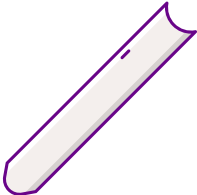
CONCEPT: LABORATORY MATERIALS 1

The laboratory portion of your chemistry course puts into practice some of the concepts you'll gradually be learning. In this section we will familiarize ourselves with some of the basic apparatuses you'll be using.

Apparatus	Use	Apparatus	Use
 _____		 _____	
 _____		 _____	
 _____		 _____	
 _____		 _____	

CONCEPT: LABORATORY MATERIALS 2

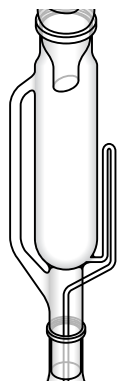
Our previous review of laboratory apparatuses dealt with the measuring and transferring of liquids and aqueous solutions. Now we take a look at apparatuses dealing with solids.

Apparatus	Use	Apparatus	Use
 _____		 _____	
 _____		 _____	
 _____		 _____	

PRACTICE: LABORATORY MATERIALS

EXAMPLE 1: If a scientist wishes to measure out exactly 25.0 mL of a 0.100 M HCl solution and add it to a 0.200 M NaOH solution, which instrument would be most useful?

- a. Transfer pipet
- b. Soxlet extractor
- c. Graduated cylinder
- d. Volumetric flask
- e. Buret



Extractor

EXAMPLE 2: What is the molarity of a solution made by mixing 200 mL pure water with 100 mL of 0.75 M KCl (aq)?

- a. 0.10 M KCl (aq)
- b. 0.25 M KCl (aq)
- c. 0.50 M KCl (aq)
- d. 1.50 M KCl (aq)
- e. 2.25 M KCl (aq)

EXAMPLE 3: How can a 100-fold dilution be achieved?

- a. 1 part solvent to 99 parts solution.
- b. 90 parts solvent to 10 parts solution.
- c. 99 parts solvent to 1 part solution.
- d. 100 parts solvent to 1 part solution.
- e. 10 parts solvent to 1 part solution.