

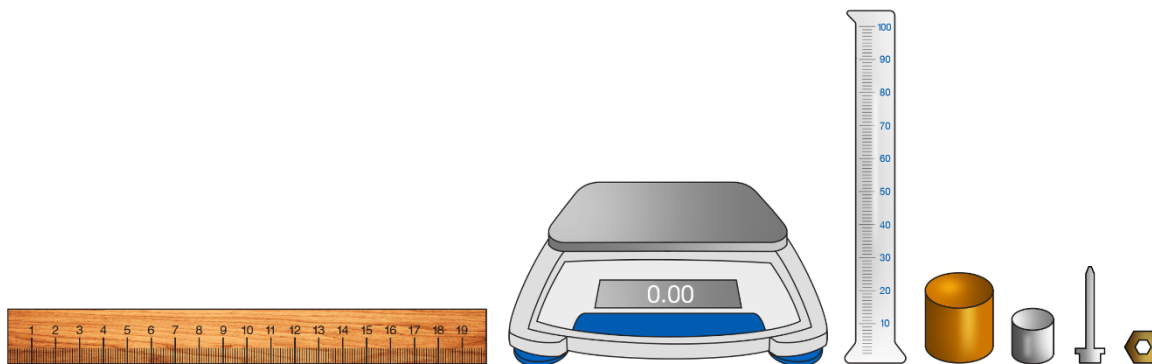
## 2A – DENSITY OF A SOLID

### INQUIRY

How can you determine the density of solid materials in order to identify the substances?

### MATERIALS

- Several samples of solid materials of regular and irregular shape
- Graduated cylinder, 100-mL
- Centimeter ruler
- Balance (readability: 0.01 g)



### BACKGROUND

The density of a solid material is a characteristic property of the material that varies widely and can be measured and used to identify the substance.

### SAFETY

Follow regular lab safety procedures.

### PROCEDURE

1. You will be given several samples of solid materials. Design a procedure to determine the mass and volume of each item. Incorporate ways to minimize sources of error when possible. Write your procedure on a separate paper. Have your teacher approve the procedure.
2. Perform the experiment according to your procedure. Enter the measurements in Table 1 on your answer sheet. Use the correct number of significant figures.

### ANALYSIS

Complete the analysis on your answer sheet.

### QUESTIONS

Answer the questions on your answer sheet.