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I. Introduction

Why are windows made of glass?



Image Source: Pearson Chemistry

When you think of a window, you probably think of something that you can look through. Most windows are made of glass and are transparent, meaning you can see through them. If you found a piece of broken glass on the ground, you would probably recognize it as glass. Glass is hard, yet easy to shatter, and it is heat resistant. In this challenge you will learn how properties can be used to classify and identify matter.

Your Challenge

Design an experiment to investigate a **property** of the **3** different materials provided. You and your partner will be expected to do the following:

- **Demonstrate** that you have the **background knowledge** required to design and conduct an experiment to investigate a **property** of the materials provided.
- **Design** an experiment to investigate a **property** of materials provided.
- **Conduct** an experiment to **accurately** determine a **property** of the material provided.

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II. Make Predictions

<p>1. This is what I think will happen when sample A is dropped into water [Use labeled diagrams to explain your reasoning - what you think will happen and why]</p>	
<p>2. This is what I think will happen when sample B is dropped into water [Use labeled diagrams to explain your reasoning-what you think will happen and why]</p>	
<p>3. This is what I think will happen when sample C is dropped into water [Use labeled diagrams to explain your reasoning-what you think will happen and why]</p>	

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III. State the Problem:

In the space below state the problem you will solve in the the form of a question.

IV. Research

A. Read like a scientist:

- a. **State your purpose for reading**
- b. **Survey the reading material:** Understand the patterns in the text by noticing key information so you can explain ideas and concepts you learned to anyone.
- c. **Notice & Note:** Discuss what you learned in a graphic map. Summarize the outcome of the discussion in a graphic map below.

IV. Research

B. Formulate your concept questions: In the space below. List **5 concepts** you should know before investigating the properties of the 3 materials

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provided. Write concepts in the form of a question.

1.

2.

3.

4.

5.