



What's the Matter?

Description:

Teams will be assessed on their knowledge of the physical properties of matter and the behavior of solids, liquids, and gases before and after they undergo changes or interactions.

Number of Participants: 2

Approximate Time: 45 minutes

Materials: goggles provided at competition

The Competition:

1. This event will be run as stations that the students rotate through. Stations may assess any or all of the following topics:
 - a. Understand the behavior of particles in different states of matter (solid, liquid, gas) regarding shape and volume.
 - b. Know how to measure and/or calculate volume of a rectangular prism and a liquid in a container.
 - c. Understand the concept of relative density and how it can be changed in solids, liquids, and gases.
 - d. Differentiate between a solution and a mixture and how they can be separated.
 - e. Know examples of physical changes and signs that a physical change has taken place (e.g. tearing a piece of paper)
 - f. Understand dissolving and concentration of substances such as food dye, salt, and sugar in water, and the factors that affect solubility such as stirring and heat.
 - g. Observe or test for other properties of matter to include: magnetism, flexibility, hardness, opacity, strength, viscosity (runniness), and buoyancy.

Scoring:

The score will be based on the following:

- Points awarded for the accuracy of responses. Ties will be broken by responses to pre-selected questions chosen by the event leader or time.