

An Introduction to Matter

Summary

In this activity you will learn about three different states of matter (solid, liquid, and gas) and compare their physical properties. By using observations, will you be able to determine what form of matter is in each balloon?

Materials

- 3 balloons (*about the size of your hand*)
 - 1 balloon filled with water and frozen overnight
 - 1 balloon filled with water
 - 1 balloon filled with air
 - *You can blow it up or use a pump. In our video, we attached a balloon to the end of a plastic bottle. We were able to squeeze the bottle to partially inflate the balloon.*
- Tray or cookie sheet (*for easy clean up*)

Steps to Follow (*All activities must be done with adult supervision*)

1. Choose a balloon to investigate then answer the questions below. *It doesn't matter which balloon you choose, but we like to start with solid one.*
 - a. Can you squeeze the balloon and make it change shape?
 - b. If you shake it, can you hear anything moving on the inside?
 - c. Drop the balloon onto the table. *Just a few inches off the table is enough.* Does it bounce?
 - d. What do you think is inside of this balloon?
2. After you answer each of the questions, open each balloon to find out what was inside. *We recommend placing a cookie sheet or tray down to catch any spills and contain any mess when you go to open the balloons.*

Early Learning and Development Standards

General Cognition and Knowledge/Science/Science Inquiry and Application/Inquiry
General Cognition and Knowledge/Science/Physical Science/Explorations of Energy

Ohio Learning Standards

1.PS.1, 3.PS.2

New Generation Science Standards

2-PS1-2