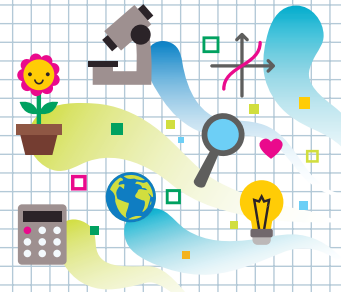




HEADS IN, HEARTS IN

States of Matter

Instructions for Set-Up



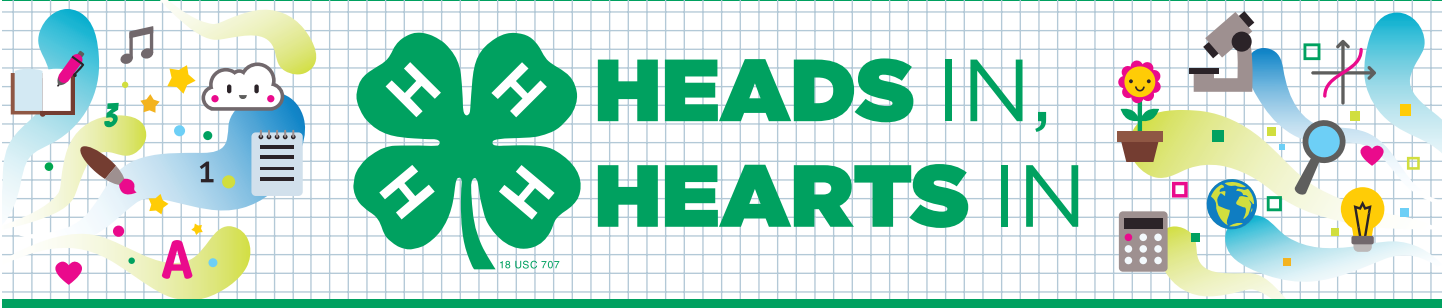
Supplies

- “Guide for Families” handout
- Clear plastic standup display (optional)
- “States of Matter” worksheet (1 per participant)
- Descriptions of each state of matter
- Hole reinforcement stickers
- Crayons (if desired)
- Display table

Activity Preparation

- ▶ Purchase or locate items on the supply list.
- ▶ Print one copy of the “Guide for Families” handout. Laminate or place in a clear plastic standup display to allow participants to see it more readily.
- ▶ Print copies of “States of Matter” worksheet. (Print “States of Matter” on one side and the table on the other side.)
- ▶ Set up the display table with the supplies.





States of Matter

Guide for Families

Learning Objectives

What you need to know:

Objects that take up space and have mass are called matter. Everything around you is made of **matter**. Solid, liquid and gas are three states of matter.

Solids, such as a desk, a chair or a phone, are firm and stable. Their molecules are grouped together in organized patterns. The molecules might vibrate slightly but they don't move around.

Liquids, such as water, rain or milk, take the shape of the container they are in, although their volume doesn't change. The particles are packed together, but don't form any type of a pattern. These molecules move around.

Gases, such as air, steam and helium, shift to fit the container they are put in and can even fill it. The molecules of gases are spaced far apart.

What you will do and learn:

You will be able to describe the relationship between particles and how they move as a liquid, solid and gas. You will describe how molecules are different in each state of matter.

Instructions

1. Take one sheet of paper labeled "States of Matter."
2. Read the descriptions of each state of matter in the table on the back: Solid, liquid and gas.
3. In the table, use the stickers to show the relationship between particles for each state of matter:
 - ▶ Solid (in a pattern; packed tightly and close together)
 - ▶ Liquid (spread apart with no pattern)
 - ▶ Gas (very loose and spread out).
4. You can use the front of the "States of Matter" worksheet to draw items that are solids, liquids and gasses.

States of Matter Handout

States Of Matter

States of Matter

States of Matter Handout

States Of Matter, continued

Solid	Liquid	Gas
Has mass Takes up space Has its own shape	Has mass Takes up space Takes the shape of container	Has mass Takes up space Fills up the entire container