

Project FOCUS

SECOND GRADE

Title of Lesson: States of Matter - Particles

Theme: Physical Science

Unit Number: Unit Title:

Performance Standard(s) Covered (enter code):

S2P1: Students will investigate the properties of matter and changes that occur in objects.

S2P1a: Identify the three common states of matter as solid, liquid, and gas.

S2P1b: Investigate changes in objects by tearing, dissolving, melting, squeezing, ect.

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions**
- Uses numbers to quantify**
- Works in a group**
- Uses tools to measure and view**
- Looks at how parts of things are needed**
- Describes and compares using physical attributes**
- Observes using senses**
- Draws and describes observations**

Content:

States of Matter, Molecules, Solids, Liquids, and Gases

Learning Activity:

Abstract: This experiment shows the students how molecules are arranged in solids, liquids, and gases.

Details: A tri-fold using construction paper or copy paper was used to split the three states of matter into separate categories the night before (see picture below). A box is drawn on each section of the paper each for solids, liquids, and gases. Cheerios are used to represent the molecules. The students glue the cheerios in the boxes to represent the arrangement of molecules in each state of matter. Below, the students are given three different pictures representing one state of matter and glue it under the corresponding section. Below the pictures, the students can write another example or properties discussed about each.

Materials Needed:

Construction/Copy Paper (1 trifold for each student)

Markers

Glue

Cheerios

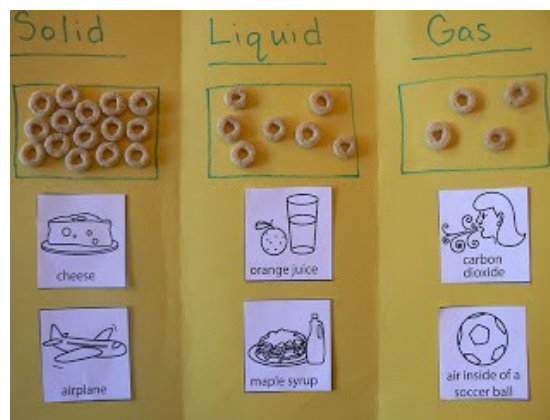
Safety Concerns:

There were not very many safety concerns for this experiment beyond the students wanting to eat the cheerios even if they had glue on them so make sure they only have a few cheerios at a time.

Notes and Tips (general changes, alternative methods):

Try to maintain the students attention and make sure they know why the particles (cheerios) are arranged differently in the various states of matter. Ask questions as a good way to keep their focus on the topic. Help each student with the glue individually so they do not use too much or put it in the wrong places.

Sources/References:



<http://mrstsfirstgrade-class-jill.blogspot.com/2011/12/states-of-matter.html>