Physical Changes and States of Matter- Two
3rd Grade
Cheri Higgins

Benchmark:

3rd Grade SLC 11-Identify characteristics of a simple physical change.

Students will identify a physical change as a change in size shape or state of matter. Students will demonstrate an understanding that the water cycle includes when matter evaporates and condenses.

Objectives:

Students will demonstrate physical changes and identify states of matter

Materials:

For each group of 4 students:
- Balloon
- Piece of Paper
- Chocolate candy bar
- Ice cube

For each student:
- Worksheet

Initial Demonstrations:

The class will observe the water level in the cup left out from day one and explore their predictions about evaporation. This example of liquid to gas will be reinforced with an earth model (see Lesson 3).

Target Observation:

- The water level in the cup changed
- The water had to go somewhere

Target Model:

- The water left the cup by evaporating
- The water is now “water vapor”, or steam, a gas.
Procedure:

Students will work in groups of 4. Each group will be given a tray with the four items (Chocolate bar, piece of paper, ice cube, and a balloon). The groups will each record the states of matter of the objects at the beginning, cause a physical change, and record the states of matter on their worksheets.

Target Revised Model:

- One substance can undergo many different types of physical changes
- Changing the shape, size, state of an object are all physical changes
- Ice is a solid; water is a liquid; steam is a gas. All three are states of water ($H_2O$).
- Just because an objects temperature changes does not mean its state will too (warming the paper didn’t make it melt, nor did the balloon)

Summary:

Chocolate, paper, ice, and a balloon all had physical changes. These included changes in shape, size, and state of matter. After all the changes, they were still made of the same materials. Water can be found as a solid (ice), liquid (water), or gas (steam/water vapor).
Physical Changes

Name________________________

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