Physical and Chemical Changes Study Guide

S5P1. Obtain, evaluate, and communicate information to explain the differences between a physical change and a chemical change.

a. Plan and carry out investigations of physical changes by manipulating, separating and mixing dry and liquid materials.

b. Construct an argument based on observations to support a claim that the physical changes in the state of water are due to temperature changes, which cause small particles that cannot be seen to move differently.

c. Plan and carry out an investigation to determine if a chemical change occurred based on observable evidence (color, gas, temperature change, odor, new substance produced).

**Key Terms**

Chemical Change

Physical Change

States of Matter

Energy

Solid

Liquid

Gas

**Key Concepts**

What is a physical change? What are some signs that a physical change occurred?

If a physical change occurred, what are some ways to get a physical change back to its original state?

What is a chemical change?

What are at least three signs that a chemical change occurred?

What are the three states of matter?

From a solid 🡪 liquid🡪 gas- describe the change in energy of the particles in each state.

From a gas 🡪liquid🡪solid- describe the change in energy of the particles in each state.