

Middle School Lesson Plan for States of Matter Simulation (teacher page)

Approximate Length: 50 min

Learning Goal:

Students will be able to demonstrate their knowledge of the states of matter through illustrations and descriptions. These illustrations and descriptions should include:

- How varying the temperature changes the behavior of the molecules.
- How the molecules in a solid, liquid and gas compare to each other.

Background :

This lesson is used after students have studied the phases of matter and the law of conservation of mass and energy. Students have previously been introduced to the concept of kinetic energy and basic properties of solids, liquids and gases.

Lesson Plan with Simulation:

As a class, we will review properties of solids, liquids and gases. Students are given the Student Handout and will explore the States of Matter Simulation, which should take approximately 30 minutes.

- Students will complete temperature/phase tables
- Students will complete analysis questions.
- Students will write a conclusion

After the Lesson:

Activity would be followed by further explanation of phase changes and temperature leading into experiments dealing with boiling point, freezing point, and melting point.