

Predict–Observe–Explain (POE) Activity Worksheet

Changes in State of Matter Due to Temperature

Name: _____

Grade & Section: _____

Date: _____

Title: Melting and Evaporation

Learning Target

Describe how changes in temperature cause matter to change in state, such as solid to liquid to gas.

Materials

- Ice cubes
- Small bowl or cup
- Warm water
- Spoon
- Teacher demonstration of boiling water (optional)

Part 1 – PREDICT

Question: What do you think will happen to the ice cube when it is placed in warm water?

Draw your prediction:

Prediction Drawing

Part 2 – OBSERVE

What happened to the ice cube?

- ☐ The ice stayed hard.
- ☐ The ice melted into liquid water.
- ☐ The water disappeared.

What happened when the water became hotter?

- ☐ Nothing changed.
- ☐ Steam or water vapor appeared.
- ☐ The water turned solid again.

Write your observations:

Draw what you observed:

Observation Drawing

Part 3 – EXPLAIN

Why did the ice change from solid to liquid?

Why did the liquid water change into gas or steam?

Complete the Sentences

1. When temperature increases, ice changes from a _____ to a _____.
2. When water gets very hot, it changes from a _____ to a _____.
3. Heat can cause matter to change its _____.

States of Matter Table

State of Matter	Example	Shape
Solid	_____	Fixed
Liquid	_____	Takes the shape of container
Gas	_____	No fixed shape

Reflection

What did you learn about temperature and matter?
