

# Technology-Enhanced Learning – Plan

**Name:** Masome Rebaone

**Grade / Course:** Science 8 (Form I)

**Length of Activity:** 80 minutes

## Lesson Summary:

Students will review concepts on states of matter, carry out an experiment to test the concepts and prepare a report on their findings.

## Lesson Objective:

Students will be able to explain the different states of matter and relate them to their every day life.

## Resources/Technology – Teacher

Interactive Whiteboard

Ice, Water

Beakers

Thermometer

Heat source and Apparatus for heating (e.g. Bunsen Burner and Tripod Stand)

States of matter online resources

- <https://concord.org/stem-resources/states-matter>
- <http://idahoptv.org/sciencetrek/topics/matter/facts.cfm>
- <http://www.pbs.org/wgbh/nova/physics/states-of-matter.html>
- <https://www.pinterest.com/pin/222928250278495552/>

## Resources/Technology – Students

Mobile devices (e.g. Tablet PC per student) with access to internet

Ice, Water

Beakers

Thermometer

Heat source and Apparatus for heating (e.g. Bunsen Burner and Tripod Stand)

Powerpoint worksheet for science report

States of matter online resources

- <http://idahoptv.org/sciencetrek/topics/matter/facts.cfm>
- <http://studyjams.scholastic.com/studyjams/jams/science/matter/solids-liquids-gases.htm>
- <http://idahoptv.org/sciencetrek/topics/matter/archive.cfm>

## Intended Learning Outcomes

- Students will reinforce their understanding of the different states of matter
- Students will carry out an experiment to demonstrate change in states of matter (change solid (ice) into liquid (water) and liquid into gas (steam))
- Students will complete a science report worksheet that oppurtunes them to apply their understanding of states of matter.

### **Instructional Activities**

- The teacher will review and present concepts using Interactive Whiteboard to the whole class (5 minutes).
- The teacher will demonstrate how to carry out the experiment on states of matter to the whole class (5 minutes)
- The teacher will use the IWB to sensitise students on how to use the worksheet (5 minutes)
- Students will have 15 minutes to review concepts on states of matter from internet, 20 minutes to carry out the experiment and 20 minutes to write up the report.
- Students will use 5 minutes to play the states of matter game after completing write – up.

### **Learner Assessment**

- Students play the game at <http://idahoptv.org/sciencetrek/topics/matter/games.cfm> as part of their self – assessment.