Activity 1: Change of State

Name: ______________________________ Date: ______________________________

Water is water (H_2O). Whether it is solid, liquid or gas, it doesn’t change into another kind of substance. We use other words to describe when it is solid or gas. What are they?

Use the results of the experimental activity with the ice blocks and information on the reference sheet, ‘What are the facts?’, to help you summarise the activity.

1. On the following diagram insert, in the boxes and on the lines, the appropriate term that describes:
   - the process that is taking place in the direction of the arrow
   - whether there is energy input (heating) or energy loss (cooling).

2. In the boxed spaces underneath each state of water, show the arrangement of particles of water in that state. Give reasons for your answer from evidence obtained in your experiment.

3. Imagine you are a drop of water. Briefly explain what would happen to you and why, as you travelled around the path represented in the diagram.

Heating or cooling

Name of process

Solid  Liquid  Vapour

Arrangement of particles

Solid  Liquid  Vapour