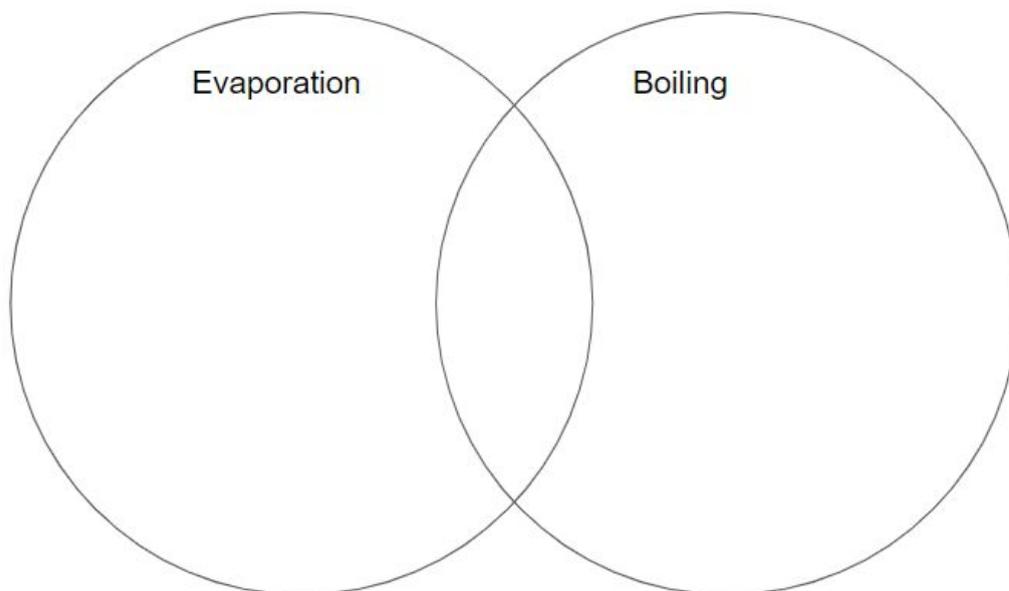


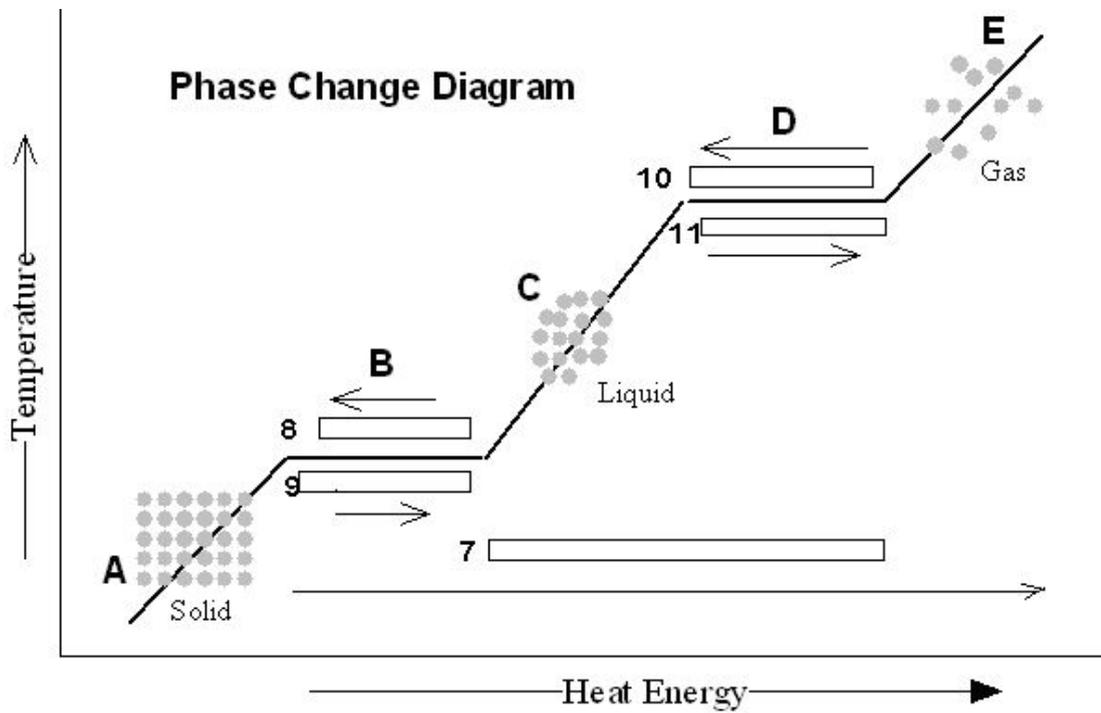
ACTIVITY 1

Compare and contrast the similarities and difference between evaporation and boiling. This task can also be used using a table.



	evaporation	boiling
similarities	Phase change from a liquid to a gas Increase in temperature Kinetic energy particles increases	
Differences where it happens	Evaporation occurs only on the surface of the liquid	boiling occurs throughout the entire liquid.
Differences in the process	The process of turning from liquid into vapour.	The action of bringing a liquid to the temperature at which it bubbles and turns to vapour.
Differences in the particle movement	particles move so fast they break away from each other & turn into a gas.	bubbles of gas appear throughout the liquid and rise to the surface.
Differences in when / at what temperature it happens	Evaporation takes place at all temperatures	boiling occurs at a specific temperature, called the boiling point

ACTIVITY 2



A solid

B phase changes - melting point

C liquid

D phase changes - boiling point

E gas

7 increase in temperature / heat energy / kinetic energy of particles

8 freezing

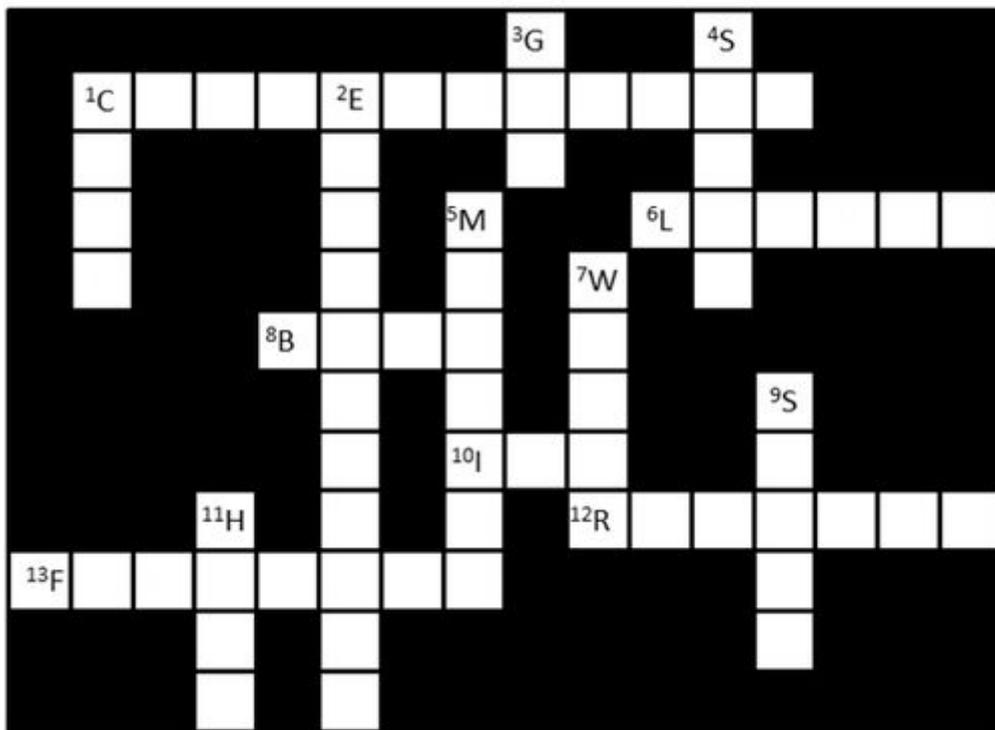
9 melting

10 condensation

11 evaporation

INSTRUCTIONS:

1. The crossword puzzle below can be completed by following the clues given below.
2. The 'Down' clues are for the vertical words in the puzzle and the 'Across' clues are for the horizontal words in the puzzle.
3. All the clues have to do with changes of state of materials, and the first letter of every word has been filled in to help you.



Here are the clues:

Down:

1. If we want to turn steam into water we have to ____ it. (4 letters) **boil**
2. The process of turning a liquid into a gas is called _____. (11 letters) **evaporation**
3. The particles of a ____ have large spaces between them. (3 letters) **gas**
4. The particles of a ____ are locked in position by strong forces. (5 letters) **solid**
5. A solid will change into the liquid state at its ____ point. (7 letters) **melting**

7. The liquid state of ice is called _____. (5 letters) **water**
9. The gaseous state of ice is called _____. (5 letters) **vapor**
11. If we want to turn water into steam we have to _____ it. (4 letters) **heat**

Across:

1. The process of turning a gas into a liquid is called _____. (12 letters) **condensation**
6. The particles of a _____ are close together but they can flow and slide over each other. (6 letters) **liquid**
8. The boiling point of a liquid is the temperature at which that liquid will start to _____. (4 letters) **boil**
10. The solid state of water is called _____. (3 letters) **ice**
12. Freezing and melting are the _____ of each other. (7 letters) **opposite**
13. _____ water turns it into ice. (8 letters) **freezing**