

# Phases of Matter



Name: \_\_\_\_\_

Period: \_\_\_\_\_

## Web Quest

### Task #1

Go to [http://www.chem4kids.com/files/matter\\_changes.html](http://www.chem4kids.com/files/matter_changes.html) to answer the following questions.

1. When do states of matter change states (phase change)?
2. What do scientists use to determine when a liquid turns into a solid?
3. What happens to the freezing point when the pressure surrounding a substance goes up?
4. When it gets colder, what happens to the size of solids?
5. What does an ice cube (a solid) need to become a liquid?
6. What does a solid have to reach in order to become a liquid?
7. What needs to happen before a gas can become a liquid?
8. When a gas becomes a liquid, what is this called?

Fill in the blanks in the following chart:

<u>Term</u>	<u>Phase Change</u>
Fusion/Melting	
	Liquid to Solid
Vaporization/Boiling	
Condensation	
	Solid to Gas
	Gas to Solid

### Task #2

Click on this link and play the matching game.

[https://www.superteachertools.net/speedmatch/speedmatch.php?gamefile=1410304416#.VBMty\\_IdWac](https://www.superteachertools.net/speedmatch/speedmatch.php?gamefile=1410304416#.VBMty_IdWac)

### Task #3

Click on this link <http://www.enchantedlearning.com/physics/Phasesofmatter.shtml> to answer the following questions.

9. What is the 4<sup>th</sup> state of matter?
10. When a solid is heated, what happens to the pressure?
11. When a solid goes directly to a gas, what is that called? Provide an example.
12. Describe the molecules in a solid, liquid, gas and plasma.

Solid:

Liquid:

Gas:

Plasma:

## Task #4

Click on this link <http://www.miamisci.org/af/sln/phases/waterliquid.html> Choose **WATER** then click on different parts of the thermometer. Observe the phase changes at different temperatures. Observe the movement of molecules in the chamber.

Complete the following chart

State of Matter	Describe Temperature	Movement of Molecules

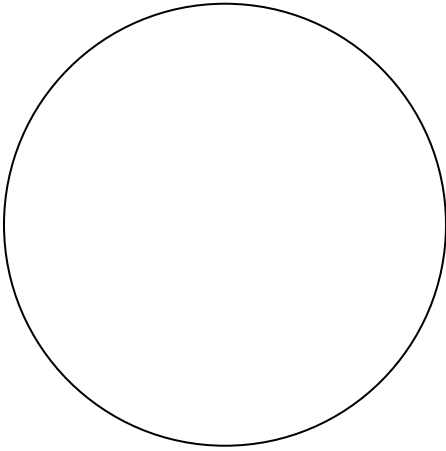
## Task #5

Go to the following site to watch the molecules move in the different phases of matter.

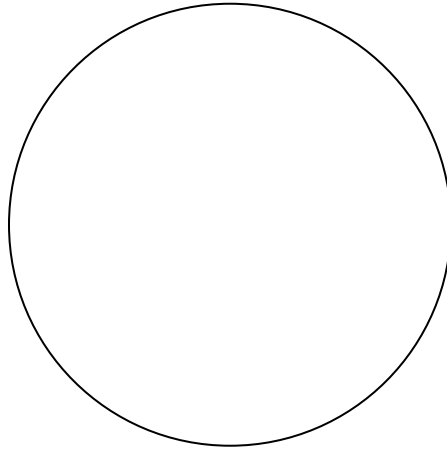
[http://www.harcourtschool.com/activity/states\\_of\\_matter/](http://www.harcourtschool.com/activity/states_of_matter/)

Draw a diagram of each phase:

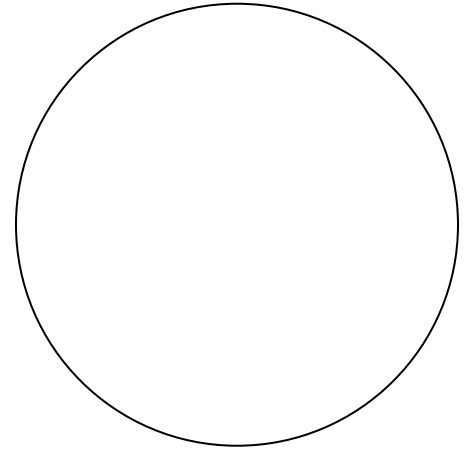
# Gas



# Liquid



# Solid

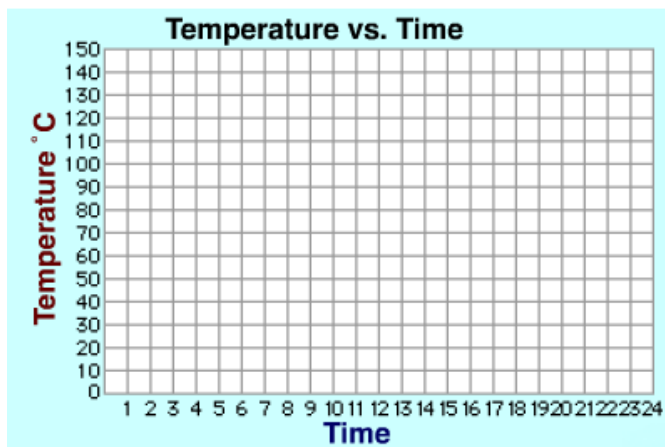


## Task #6

Go to the following site <http://www.harcourtschool.com/activity/hotplate/>

Place all 3 substances in the beaker and record the melting and boiling points for all 3 substances. Then draw the graph for water.

Substance	Melting Point	Boiling Point
Ice/water		
Purple Crystal		
Green Circles		



### Ice/Water