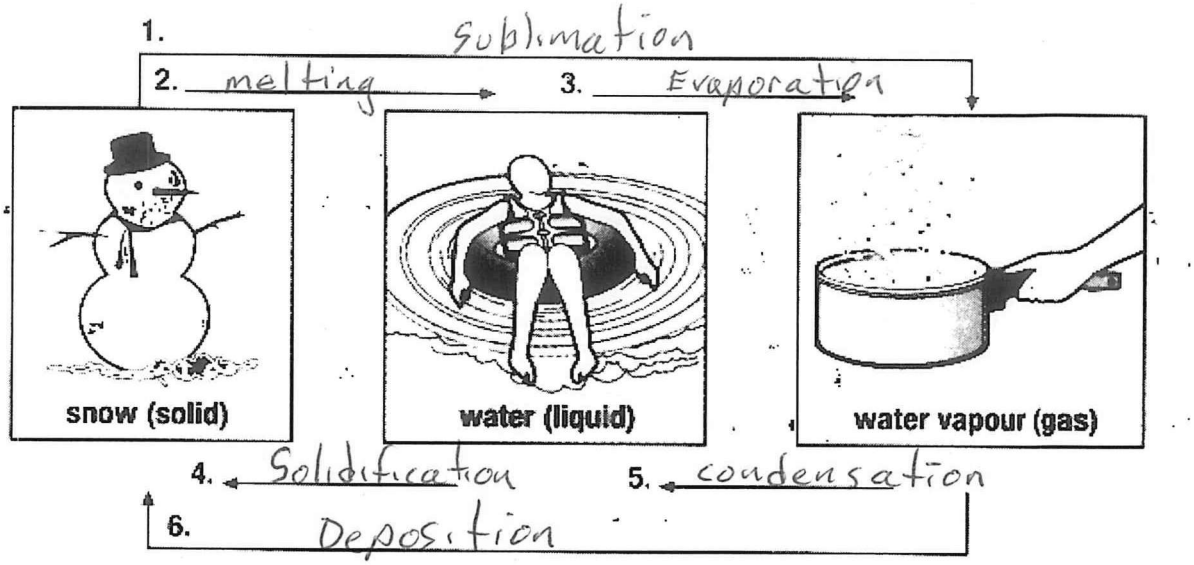
Grade 8 Science **CHANGES OF STATE WORKSHEET**

NAME: Key Class: ____ Date_____

Vocabulary	
Condensation	Melting
Deposition	Solidification
Evaporation	Sublimation

Use the terms in the vocabulary box to label the diagram. Place the terms on the numbered arrows.



7) Complete the following table by describing the change of state. The table has been partially completed to help you.

	Change of state	Heat added or released
Condensation	gas → liquid	Released
Deposition	gas → solid	released
Evaporation	Liquid → Gas	Added
Melting	solid → liquid	Added
Solidification	liquid → solid	released
Sublimation	solid → gas	Added

8) Match each **Description** on the left with the correct change of state on the right. You may use some changes of state more than once.

Term		Descriptor	
E	Ice is left out on the counter	A.	Sublimation
D	Frost forms on the window on a cold day	B.	Condensation
F	Water is left in a freezer	C.	Evaporation
C	Clothes are left out to dry	D.	Deposition
A	Dry ice is used to create fog	E.	Melting
B	The bathroom mirror gets fogged up after a shower	F.	Solidification
C	A pond gets shallower at the end of a long hot summer		
C	Your hair was wet when you left the house, but dries by the time you get to school		
E	The ice cream you are eating drips down your arm		
C	A full pot of soup fills only half of the pot after summering for 2 h		
F	Liquid glass cools and hardens		
B	A cold drink is wet on the outside of the glass		

9) What is the difference between heat and temperature?

Heat is the amount of thermal energy (Joules or Calories) but temperature is the average thermal energy. °C or °F

10) How does matter change from one state to another?

The form or state changes but the particles do not.

11) What is the relationship between the amount of space between particles and the state of the matter?

Most often, solid is the densest (least volume) and Gas takes up greater volume (for water vapor it's 40% volume)

12) How is melting similar to solidification? How is it different?

melting and solidification are opposite changes in state. Melting requires adding energy and raises temperature but solidification reduces temperature and lowers energy level.