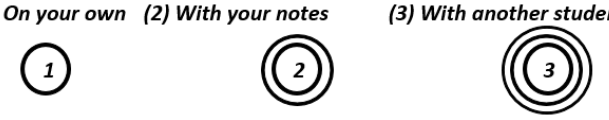
Science 8

States of Matter Practice Quiz

Name: Key
Date:
Block:

This practice test is designed to help you determine what concepts you DO know and more importantly what concepts you DO NOT know!

Go through the practice test THREE times:
(1) On your own (2) With your notes (3) With another student



Each time, if you cannot answer a question, draw a circle around it to identify that you should review this concept when preparing for the test.

Multiple Choice: Choose the best option

B 1.In a gas…

A. particles have very large spaces between them.
B. particles can move freely in all directions.
C. particles vibrate in a fixed position.
D. particles have no motion.

D 2.Which of the following statements regarding the Particle Model of Matter is **false**?

A. There are spaces between the particles
B. Particles are constantly moving
C. Particles are attracted to each other
D. Particles are small, but it is possible to see them if we squint

B 3. When energy is added to an object, the particles will…

A. Slow down
B. Speed up
C. Stay the same speed
D. Stop

D 4. Which of the following has a fixed mass?

A. Solids
B. Liquids
C. Gases
D. All of the above

D 5. Why do solids have a fixed mass, volume, and shape?

A. The particles are too heavy to move
B. The particles are stubborn
C. The particles are lazy
D. The particles are packed closely together

A 6. Water boiling is an example of which type of change in state?

A. Evaporation
B. Condensation
C. Sublimation
D. Deposition

B 7. When it is hot outside, the red liquid inside the thermometer rises. This is due to…

A. Evaporation
B. Thermal expansion
C. Particles get larger and larger
D. Thermal contraction

Short Answer

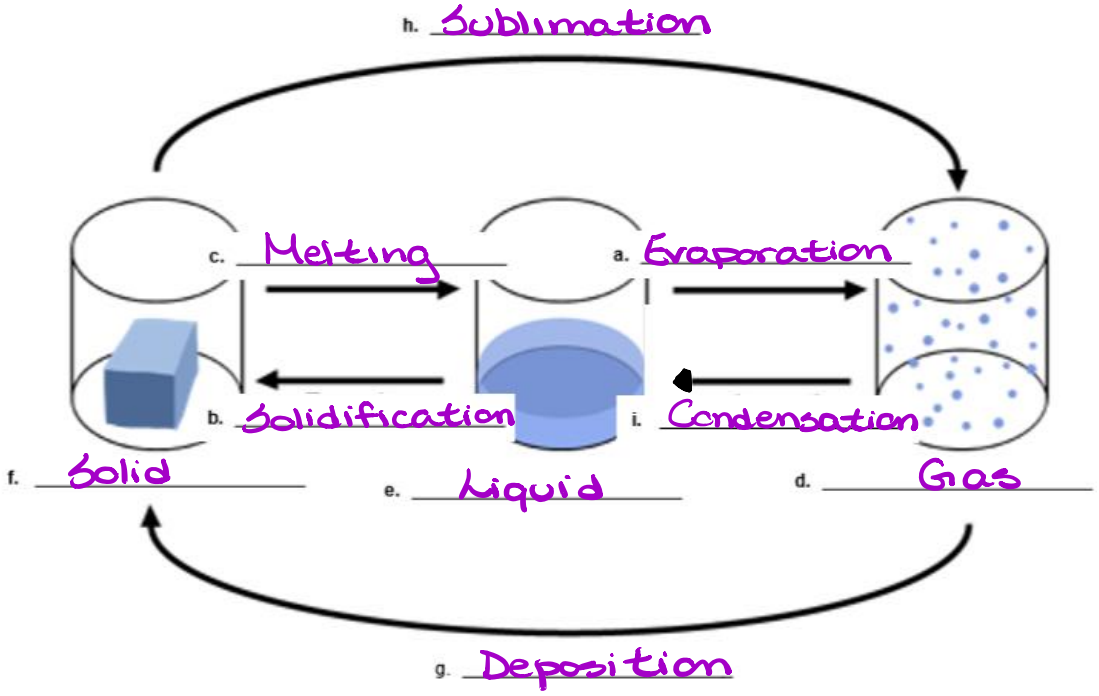
8. On highways and busy roads there are expansion joints. Theses sections are needed during the summer when the pavement of the highways or roads expand over time. Explain why the pavement expands during the summer time.

Due to the heat, the pavement will absorb heat allowing the particles to gain energy and move around more.
↳ Thermal expansion occurs

9. Complete the following table:

Change of State	Initial State of Matter	Final State of Matter	Kinetic Energy Change
Melting	Ice	Liquid	Adding Kinetic Energy
Condensation	Gas	Liquid	Remove kinetic energy
Solidification/ Freezing	Liquid	Solid	Removing Kinetic Energy
Evaporation	Liquid	Gas	Add kinetic energy
Deposition	Gas	Solid	Remove kinetic energy
Sublimation	Solid	Gas	Add kinetic energy

10. Label the following diagram:



Identify the change of state occurring in the following descriptions:

1. Morning dew forming on the grass. Condensation
2. Fog in the air. Condensation
3. Freeze drying food (removing all the liquid water in food). Sublimation
4. Lava hardens into solid rock. Solidification
5. Wet hair drying after time. Evaporation
6. Snow forming on a cold winter day. Solidification
7. A solid piece of butter resting on a hot pan turns into a liquid. Melting