

This worksheet is an alternative for your changes of state project. There are 8 different changes of state and each is worth 14 points, for a maximum of 80 points. When are you done checking your answers, select Email my answers to my teacher, and fill out the information below.

What do you want to do?

[Check my answers](#) [Email my answers to my teacher](#)

Enter your full name:  Firstname Lastname

**Choose a period**  Group/level: 3rd / 4th / 5th / 6th

School subject: science

**Choose a key code**  Enter your teacher's email or key code:  
t7cjret8ne (if you're in Mr. Foster's class)  
ns3emj318f (if you're in Mrs. O'Keeffe's class)

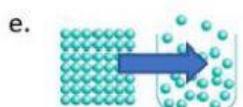
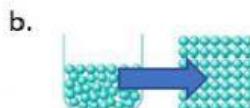
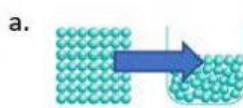
**Example: Leaving an Ice Cube on the Counter**



**Spelling Matters! Write your answer exactly how you see it in the parenthesis!**

When you leave an ice cube on the counter it will **melt**.

1. The ice cube changes from a \_\_\_\_\_ (solid, liquid, gas, plasma) to a \_\_\_\_\_ (solid, liquid, gas, plasma)
2. The particles will \_\_\_\_\_ (speed up, slow down)
3. The particles will \_\_\_\_\_ (get closer together, get farther apart)
4. The particles will \_\_\_\_\_ (gain energy, lose energy)
5. Which model shows what is happening during this change of state?

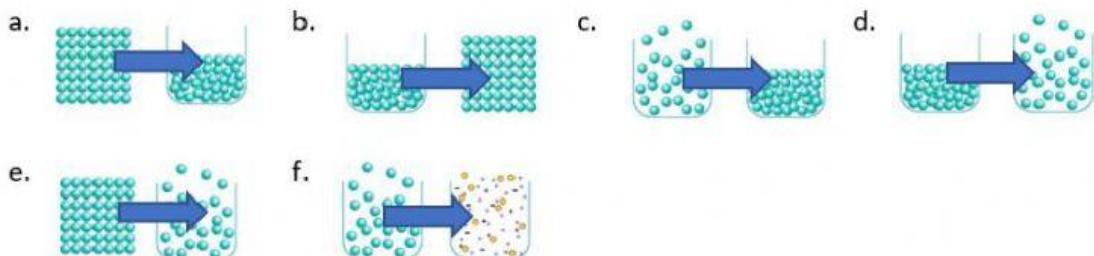


**Example: Putting water in the freezer**



When you put water in the freezer it will **freeze**

6. The water changes from a \_\_\_\_\_ (solid, liquid, gas, plasma) to a \_\_\_\_\_ (solid, liquid, gas, plasma)
7. The particles will \_\_\_\_\_ (speed up, slow down)
8. The particles will \_\_\_\_\_ (get closer together, get farther apart)
9. The particles will \_\_\_\_\_ (gain energy, lose energy)
10. Which model shows what is happening during this change of state?

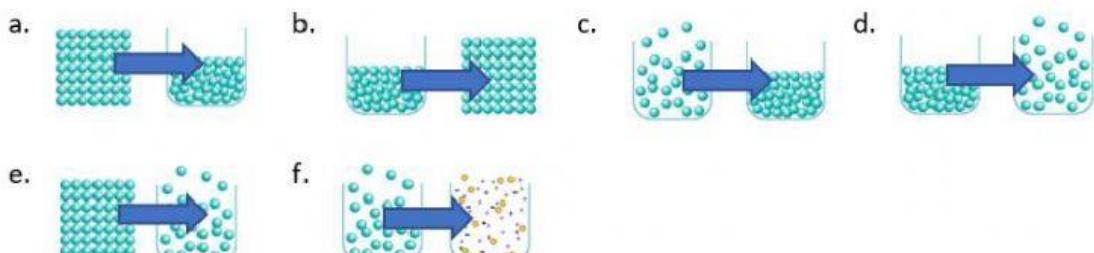


**Example: heating up water to make Raamen Noodles**



When you heat up the water on the stove it will **boil**

11. The water changes from a \_\_\_\_\_ (solid, liquid, gas, plasma) to a \_\_\_\_\_ (solid, liquid, gas, plasma)
12. The particles will \_\_\_\_\_ (speed up, slow down)
13. The particles will \_\_\_\_\_ (get closer together, get farther apart)
14. The particles will \_\_\_\_\_ (gain energy, lose energy)
15. Which model shows what is happening during this change of state?

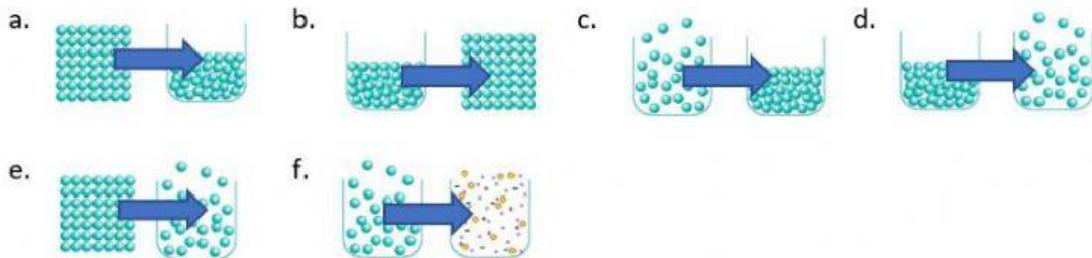


**Example: Dew is on the grass in the morning**



The dew on the grass appears because of **condensation**

16. The water vapor in the air changes from a \_\_\_\_\_ (solid, liquid, gas, plasma) to a \_\_\_\_\_ (solid, liquid, gas, plasma)
17. The particles will \_\_\_\_\_ (speed up, slow down)
18. The particles will \_\_\_\_\_ (get closer together, get farther apart)
19. The particles will \_\_\_\_\_ (gain energy, lose energy)
20. Which model shows what is happening during this change of state?

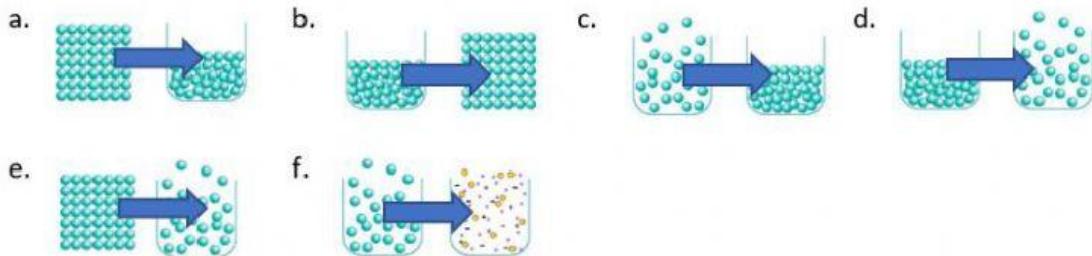


**Example: dry ice**

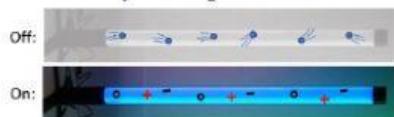


Solid carbon dioxide is also known as dry ice. When you leave it out in a room it will experience **sublimation**

21. The carbon dioxide in dry ice will change from a \_\_\_\_\_ (solid, liquid, gas, plasma) to a \_\_\_\_\_ (solid, liquid, gas, plasma)
22. The particles will \_\_\_\_\_ (speed up, slow down)
23. The particles will \_\_\_\_\_ (get closer together, get farther apart)
24. The particles will \_\_\_\_\_ (gain energy, lose energy)
25. Which model shows what is happening during this change of state?

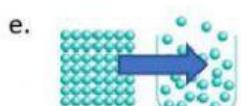
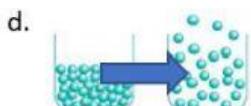
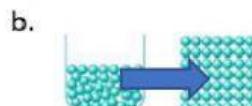
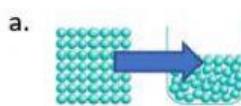


### Example: Neon Lights



The tubes are filled with gas particles. When you add energy in the form of electricity the gas particles will **ionize**

26. The particles will change from a \_\_\_\_\_ (solid, liquid, gas, plasma) to a \_\_\_\_\_ (solid, liquid, gas, plasma)
27. The particles will \_\_\_\_\_ (speed up, slow down)
28. The particles will \_\_\_\_\_ (get closer together, get farther apart)
29. The particles will \_\_\_\_\_ (gain energy, lose energy)
30. Which model shows what is happening during this change of state?

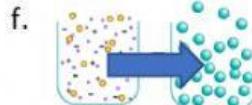
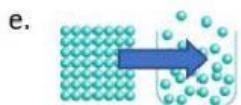
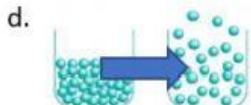
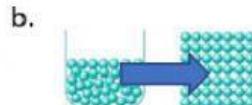
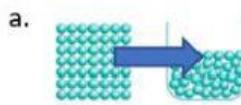


### Example: Lightning Strike



After a lightning strike, the positive and negative ions that make up the plasma will **recombine**

31. The particles will change from a \_\_\_\_\_ (solid, liquid, gas, plasma) to a \_\_\_\_\_ (solid, liquid, gas, plasma)
32. The particles will \_\_\_\_\_ (speed up, slow down)
33. The particles will \_\_\_\_\_ (get closer together, get farther apart)
34. The particles will \_\_\_\_\_ (gain energy, lose energy)
35. Which model shows what is happening during this change of state?



**Example: frost forming on leaves**



White frost covering cold surfaces is because of **deposition**

36. The particles will change from a \_\_\_\_\_ (solid, liquid, gas, plasma) to a \_\_\_\_\_ (solid, liquid, gas, plasma)

37. The particles will \_\_\_\_\_ (speed up, slow down)

38. The particles will \_\_\_\_\_ (get closer together, get farther apart)

39. The particles will \_\_\_\_\_ (gain energy, lose energy)

40. Which model shows what is happening during this change of state?

