The Kinetic Molecular Theory and Changes of State



1. Use the following phrases to describe how molecules (particles) move during each change.

*move more quickly move closer together*

*move more slowly move farther apart*

1. Draw a small diagram of the particles before and after each change of state.



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Change of State** | Molecules | | | |
| **Speed** | **Spacing** | **Diagram Before** | **Diagram After** |
| **Evaporation**  **(liquid to gas)** |  |  |  |  |
| **Condensation**  **\_\_\_\_\_\_\_\_\_\_\_\_** |  |  |  |  |
| **Melting**  **\_\_\_\_\_\_\_\_\_\_\_\_** |  |  |  |  |
| **Solidification**  **\_\_\_\_\_\_\_\_\_\_\_\_** |  |  |  |  |
| **Deposition**  **\_\_\_\_\_\_\_\_\_\_\_\_** |  |  |  |  |
| **Sublimation**  **\_\_\_\_\_\_\_\_\_\_\_\_** |  |  |  |  |

How well do you know your KMT???

Using the KMT, explain the following situations:

MCj04061920000[1]

1. A sugar cube dissolving in water.



MCj04258240000[1]



1. Using warm water to wipe up a dried on spill on the kitchen counter.



MCj03126680000[1]

1. Power lines hanging loose in the summer, but tightening in the winter.



MCj02902930000[1]

1. The second floor of a house having a higher temperature than the ground floor on a really hot day in the summer.

