**Test is on Friday, October 21st !**

**Unit 3 Study Guide**

**States of Matter and Phase Change**

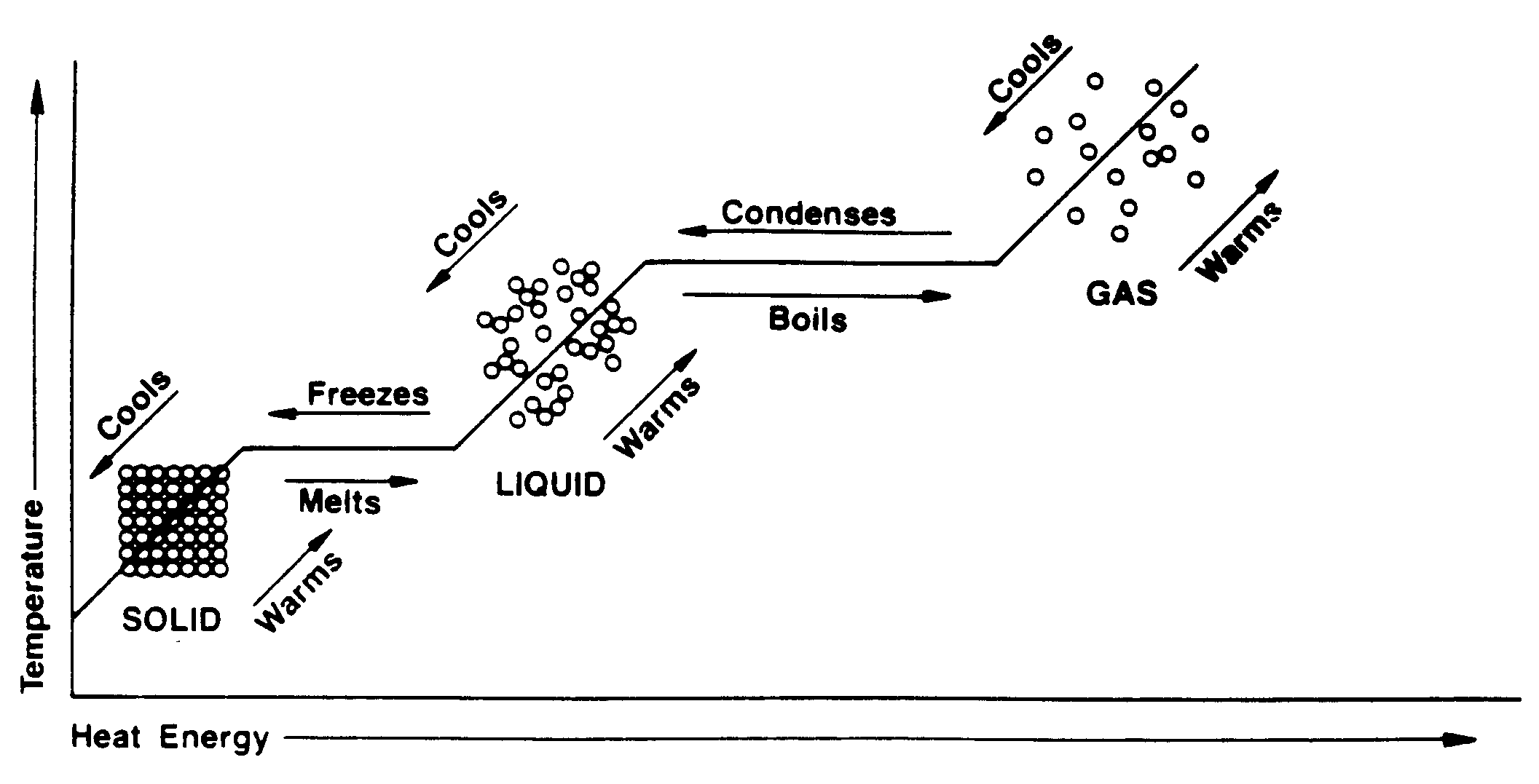
1. How can we describe the 4 states of matter? Complete the chart below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Shape** | **Volume** | **Particle Motion (Speed and Energy)** | **Drawing of Particle Spacing** |
| **Solid** |  |  |  |  |
| **Liquid** |  |  |  |  |
| **Gas** |  |  |  |  |
| **Plasma** |  |  |  |  |

1. What is the difference between and endothermic and exothermic change?
2. How does matter change state?

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Starting state 🡪 ending state** | **Endothermic or Exothermic?** | **Example** |
| **Freezing** |  |  |  |
| **Melting** |  |  |  |
| **Evaporation** |  |  |  |
| **Condensation** |  |  |  |
| **Sublimation** |  |  |  |

1. Be able to explain the phase change diagram below in terms of the following:
   1. When is temperature increasing? Decreasing? Staying the same?
   2. Where are state changes occurring?
   3. Which state(s) of matter are present at each leg on the graph?



1. What is The Law of Conservation of Matter/Mass? Give an example.