1. Heat is the energy that is transferred from a warmer object to a cooler object

3. On the Kelvin scale, zero kelvins refers to absolute zero, the lowest temperature possible. At absolute zero, particles theoretically would have no kinetic energy. They would be completely motionless! So, the Kelvin scale only goes up from zero.

4. The amount of matter or mass and the temperature are the two factors that determine the thermal energy of an object. If a substance contains more mass, then it has more particles and it will have high thermal energy.

6. When you heat ice, its temperature rises, but as soon as the ice starts to melt the temperature stays constant until all the ice has melted. This happens because all the heat energy goes into the center and starts breaking it down.

7. The possible reason for such a condition is that Object B contains a lower temperature but has a greater amount of matter or mass than Object A.