When an object gets warm, it is because its molecules are moving fast. The warmer an object is, the more kinetic energy its molecules have. Kinetic energy is also known as thermal energy. To tell how warm or cold an object is, one would measure its temperature. Temperature is a measure of the average kinetic energy of an object’s molecules. Substances that have high temperatures have molecules that move very fast. Temperature has no upper bound; there is no limit to how hot an object can get. However, there is a point where an object cannot get any colder. This is called absolute zero, and it has a Celsius temperature of -273 degrees. At this temperature, molecules do not have any kinetic energy because they have stopped moving.

Use the above information to assist in answering the questions. Select the best answer from the choices.

What is kinetic energy?

1. Energy of position
2. Energy of motion

A substance with a high kinetic energy is…

1. Warm
2. Cold

What is another name for kinetic energy?

1. Heat
2. Thermal energy
3. Potential energy

What is temperature?

1. Measure of total kinetic energy
2. Measure of partial kinetic energy
3. Measure of average kinetic energy

High temperatures mean that molecules are moving very…

1. Fast
2. Slow

Temperature has an upper limit

1. True
2. False

The lower limit of temperature is called…

1. Zero degrees Celsius
2. 32 degrees Fahrenheit
3. Absolute zero

What happens to molecules at absolute zero?

1. They do not move
2. They move very slowly
3. They move quickly