

Heat and Temperature Practice Quiz Topic 3 - The Particle Model

1. The Particle Model of Matter helps to explain ideas about Thermal Energy. This model includes each of the following points EXCEPT ...

all substances are made up of tiny particles that are too small to see

the particles are always in motion

the particles increase their energy output when they collide

the particles have spaces between them

2. Another important idea about temperature and the particle theory is that the motion of particles increases when the temperature increases. Which statement below is also correct?

as the motion of particles decreases the temperature remains the same

as the temperature decreases the motion of the particles also increases

as the motion of the particles decreases the temperature decreases

as the temperature increases the motion of the particles decreases

3. Energy is the measure of something's ability to do work. Which of the following has the most thermal energy?

a dead battery

a melted slurpee

a cup of hot coffee

a swimming pool

4. Which of the following energy transfers would be correct?

thermal energy in a hot drink is transferred to cold hands

thermal energy is transferred from a room to a heater, so it can be heated

an ice cube loses thermal energy when it melts in hot lemonade

thermal energy is lost by a match when it is lit

5. Which of the following statements about energy is a correct scientific description of what energy is?

energy is a substance that can be transferred

the mass of energy can be measured using a precision instrument

energy fills the space with highly charged tiny particles

energy is a description of a quality or a condition

Check [Answers](#)

Heat and Temperature Practice Quiz Topic 3 - The Particle Model

1. The Particle Model of Matter helps to explain ideas about Thermal Energy. This model includes each of the following points, EXCEPT ...

all substances are made up of tiny particles that are too small to see

the particles are always in motion

the particles increase their energy output when they collide (Text p. 203) Top of the page lists the three most important ideas about the particle model

the particles have spaces between them

2. Another important idea about temperature and the particle theory is that the motion of particles increases when the temperature increases. Which statement below is also correct?

as the motion of particles decreases the temperature remains the same

as the temperature decreases the motion of the particles also increases

as the motion of the particles decreases the temperature decreases (Text p. 204) The motion of the particles decreases when the temperature decreases

as the temperature increases the motion of the particles decreases

3. Energy is the measure of something's ability to do work. Which of the following has the most thermal energy?

a dead battery

a melted slurpee

a cup of hot coffee (Text p. 204) A 'hot' substance has more energy than a cold one

a swimming pool

4. Which of the following energy transfers would be correct?

thermal energy in a hot drink is transferred to cold hands (Text p. 205) Thermal energy is transferred from high energy source to something with low energy

thermal energy is transferred from a room to a heater, so it can be heated

an ice cube loses thermal energy when it melts in hot lemonade

thermal energy is lost by a match when it is lit

5. Which of the following statements about energy is a correct scientific description of what energy is?

energy is a substance that can be transferred

the mass of energy can be measured using a precision instrument

energy fills the space with highly charged tiny particles

energy is a description of a quality or a condition (Text p. 207) Energy is not any of the other statements, it describes a quality or condition