

Heat Partner Practice

1. What are the 2 *kinds of energy* and how do they differ?
 1. *Kinetic energy* is the energy of motion and can be transferred. Potential energy is stored energy.
2. What is *heat*?
 2. *Heat* is the movement of thermal energy from a substance at a higher temperature to another at a lower temperature (warmer to cooler).
3. Name 3 ways *heat is transferred*.
 3. *Heat is transferred* by conduction, convection, and radiation.
4. What is *conduction*?
 4. *Conduction* is the transfer of heat by direct contact between particles.
5. What is *convection*?
 5. *Convection* is the transfer of heat by movement of currents within a liquid or gas.
6. What is *radiation*?
 6. *Radiation* is the transfer of heat by electromagnetic waves.
7. What is the difference between an *insulator* and a *conductor*?
 7. An *insulator* is any material that stops or inhibits the transfer of heat and a *conductor* allows the transfer of heat.
8. What is the difference between *contraction* and *expansion*?
 8. *Contraction* is a decrease in the space between the particles in an object (it gets smaller) and *expansion* is an increase of space between the particles (it gets bigger).
9. What is *temperature*?
 9. *Temperature* is the measure of the average kinetic energy of the particles in a sample of matter.
10. What are the *boiling* and *freezing points* of water on the Celsius, Kelvin, and Fahrenheit scales?
 10. *Boiling point* is 100° Celsius, 373 Kelvins, and 212° Fahrenheit. *Freezing point* is 0° Celsius, 273 Kelvins, and 32° Fahrenheit.