

Heat Worksheet

Find under **Nature and Science**



1. True or False: Heat is a form of energy.
2. Name some of the ways that people use heat.
3. What is the Earth's most important source of heat?
4. What is thermal energy?
5. True or False: Heat moves between objects through thermal energy.
6. True or False: Heat always flows from cooler objects to warmer objects.
7. Why does ice melt in a glass of water?
8. True or False: Most solids and liquids expand when they are heated.
9. True or False: Heat and temperature is not something engineers need to think about when designing rail lines, bridges, buildings and even electronics.
10. How is temperature measured?
11. What happens to the liquid in the thermometer if it is heated?
12. What is conduction?
13. Give an example of how heat moves from one object to another object?
14. What is convection?
15. What is radiation?
16. Give an example of a conductor.
17. What is an insulator?

ANSWERS:

1. True
2. To maintain a steady body temperature, cook food, warm homes, bend and shape metals, power machinery e.g. cars, electricity.
3. The sun.
4. Thermal energy is the energy that makes particles in matter move.
5. True
6. False
7. The liquid water is warmer than the ice, so its particles are moving a little faster. The thermal energy from the water flows to the ice and makes the particles in the ice speed up, causing it to melt.
8. True
9. False
10. Temperature is the measure of thermal energy in an object and is measured using a thermometer.
11. The liquid rises.
12. The movement of heat from one particle to another.
13. An example of how heat moves from one object to another is if you leave a metal spoon in a hot pot of food, the metal spoon will become hot, also.
14. Convection is when heat is moving.
15. Movement of heat without any matter to carry it.
16. Metals are good conductors. Heat can travel through pans easily.
17. A material used to reduce the motion of heat, for example, an oven mitt or a winter jacket.