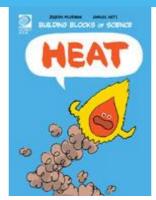
## BUILDING BLOCKS ... SCIENCE!



## **Heat Activity Sheet**

- 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.