P. 54-68 Vocabulary and Phrases

Directions: Find the definitions and responses to the following questions in your textbook. **DO NOT** use Google to complete this table.

The quiz will be on Tuesday April 20th.

| **Vocabulary term or phrase** | **Definition/Response** |
| --- | --- |
| What is thermal energy? | Thermal energy is the total of all the kinetic and potential energy of the atoms in an object. |
| What is heat? | Heat is the energy that is transferred from a warmer object to a cooler object. |
| What is the difference between thermal energy and heat? | Thermal energy comes from a substance whose molecules and atoms are vibrating faster due to a rise in temperature. Heat energy is another name for thermal energy. |
| How are thermal energy and temperature related? | When the temperature of an object increases, the average kinetic energy of its particles increases. When the kinetic energy of its particles increases, the object's thermal energy increases. So the thermal energy of an object increases as its temperature increases. |
| Explain the tea cup and tea kettle example on page 59. | The tea kettle because the pot has more tea than the cup. |
| What is conduction? What is an example? | Conduction is the transfer of energy from one particle of matter to another within an object or between two objects that are in direct contact. For example conduction occurs when you place your head on a cool pillow. |
| What is convection? What is an example? | Convection is a type of heat transfer that occurs through the movement of fluids, which can be solid, liquid, and gas. For example fluids are materials that flow. |
| What is a convection current? | A convection current is air because wind and changes in the weather. |
| What is radiation? What is an example? | Radiation is the transfer of energy by electromagnetic waves. For example you can feel radiation without touching the flames. |
| Look at figure 3 on page 66. How are conduction, convention, and radiation shown? | Conduction, convention, and radiation are shown by the energy going all around the pizzas. |