Transfer of Thermal Energy worksheet. Name_____

1. How does the energy of the Sun get to the Earth? Explain why it works.

2. Which has more thermal energy, a 5-kg bowling ball that has been resting on a hot driveway for 4 hours on a 35^0C day, or the same bowling ball rolling down a lane in an air-conditioned bowling alley? Explain.

3. How is energy transferred during convection?

4. What type of substances does conduction work best in? In other words what substances are good conductors?

5. Does convection occur in solids? Explain why or why not.

6. Give 3 examples each of conduction, radiation and convection.

   Conduction: Convection: Radiation:

7. An insulator is something that prevents or slows the transfer of heat. List three insulators.

8. Explain why the rug on your floor feels warmer than the tile in the same room.