

ENERGY FROM THE SUN WORKSHEET

Complete the chart on the three types of heat transfer and their causes. Then answer the following questions on the lines provided.

Types of heat transfer	How they are produced
<i>Radiation</i>	<i>produced by:</i>
<i>Conduction</i>	<i>produced by:</i>
<i>Convection</i>	<i>produced by:</i>

1. In some home heating systems, warm air rises on one side of a room and forces cold air across the room where it sinks to the floor. What type of heat transfer is this?

Radiation Conduction Convection

2. When you get in a closed car on a sunny day and the temperature inside is much warmer than outside, what type of heat transfer has taken place?

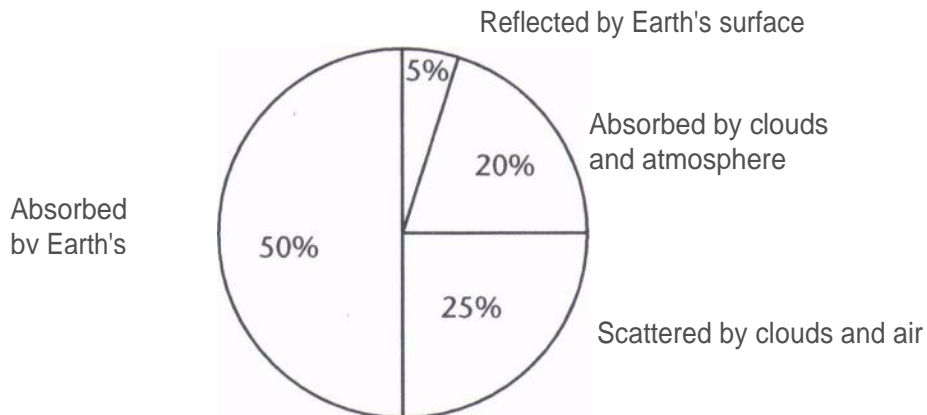
Radiation Conduction Convection

3. If you put a frying pan on a burner on a stove and turn the burner on, the bottom of the frying pan gets hot. What type of heat transfer has occurred?

Radiation Conduction Convection

Answer the following questions using the information from the graph.

What happens to radiation coming to Earth from the sun?



4. Why doesn't all radiation directed at Earth reach the surface?
5. What percent of radiation is lost before reaching Earth's surface?
6. What percent of radiation is lost after reaching Earth's surface?
7. What factor in the atmosphere seems to have the greatest effect on radiation coming from the sun?