

Homework 26e Convection and .

1. Use the words in the HELP-BOX to copy and complete the paragraph below.

solar	rises	heat	infra-red
reflects	air	cold	convection

Thermal energy can be carried through a liquid by a current. The liquid moves because hot liquid and cold liquid falls. Convection currents can also flow in and other gases. from the Sun reaches the Earth by radiation. Light and rays travel from the Sun through empty space. All hot and warm bodies emit (give out) rays which we cannot see but we can often feel.

2. Draw a simple diagram of a room with a heater at one side. Draw arrows on the diagram to show the movement of convection currents in the room. Label the places in the room where the air is warm and where it is cool.
3. Explain why:
 - (a) Food cooks faster at the **top** of an oven.
 - (c) Houses in hot countries are often white.
 - (d) There is shiny metal behind the bar of an electric fire.
4. Two teapots are identical except for colour. One is dull black and the other is shiny white.
 - (a) Which teapot would you expect to keep the tea hot longest?
 - (b) Explain your answer to part (a).
5. Write a plan for an experiment you could do to find out if colour affects how quickly hot objects cool.