ESL/ELD Stage 1+Stage 2: Grade 7 Science

Strand 3: Heat (Vol.1)

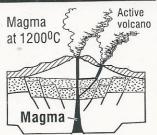
Learning About Heat (page 2)

Teacher led discussion

What is heat?

Thermal energy is the heat stored in a thing. Heat is thermal energy that is transferred from one thing to another.

Very much heat stored in Magma



Much heat stored in Hot Coffee



Little heat stored in Tap Water



Very little heat stored in Ice Cubes



Radiation

Heat transferred through a vacuum

Transfer of heat

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To the Earth

(e.g., outer space, inside a light

Outer space,

is a vacuum

bulb) is called radiation.

From the Sun

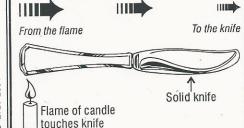
How is heat transferred from one object to another?

Heat is transferred by conduction, convection and radiation.

Conduction

Heat transferred through solids is called conduction.

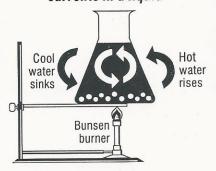
Transfer of heat



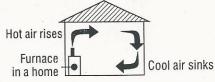
Convection

Heat transferred through liquids and gases by circulating currents is called convection.

Transfer of heat by circulating currents in a liquid



Transfer of heat by circulating currents in a gas



Transfer of heat by circulating currents in a gas

> Air rises from hot element Electric element

To the edge To the edge From the filament of bulb of bulb Inside a light bulb is a vacuum The filament is very hot

Transfer of heat

Light Bulb

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