

# CIE Physics GCSE

## Topic 2.3 - Thermal Processes

### Flashcards

In what kind of materials can conduction occur?

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## Solids and liquids.

# Describe the process of conduction (supplement)

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- Solid/liquid is heated
- Particles vibrate more
- Energy is transferred to adjacent molecules via collisions, transferring energy from hot to cold regions

# In which materials can convection occur?

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## In fluids (liquids and gases).

**Describe the process of convection.**

## Describe the process of convection.

- When a section of fluid is heated, it becomes less dense
- This causes it to rise
- Denser fluid falls to take its place and is then heated, causing it to rise
- This sets up a convection current

# What kind of materials can transfer infrared radiation?

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Any kind of material; it does not require a medium.

# What is infrared radiation?

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## It is an electromagnetic wave.

# What are the best absorbers of infrared radiation?

# What are the best absorbers of infrared radiation?

## Black, dull surfaces.

# What are the best emitters of infrared radiation?

# What are the best emitters of infrared radiation?

White, shiny surfaces.

What factors affect the amount of IR  
emitted by a body? (supplement)

What factors affect the amount of IR emitted by a body? (supplement)

- Temperature (higher = more IR)
- Surface area (larger = more IR)