

GCSE Physics Learning Checklist

Unit 1: Energy

Subsection: Energy transfer by heating

I can...		After Lesson	After Revision
1	...state which materials make the best conductors and insulators.		
2	...explain how the thermal conductivity of a material affects the rate of energy transfer through it by conduction.		
3	...explain how the thickness of a layer of material affects the rate of energy transfer by conduction through it.		
4	...explain what infrared radiation is		
5	...explain how infrared radiation depends on the temperature of an object		
6	...explain what is meant by black body radiation		
7	...describe what happens to the temperature of an object if it absorbs more radiation than it emits		
8	...describe what happens to the temperature of an object if it absorbs more radiation than it emits		
9	...explain how the temperature of the Earth is affected by the balance of absorbed and emitted radiation		
10	...explain the specific heat capacity of a substance means		
11	...calculate the energy changes that occur when an object changes temperature		
12	...explain how the mass of a substance affects how quickly its temperature changes when it is heated		
13	...measure the specific heat capacity of a substance.		
13	...explain how homes are heated		
14	...describe how you can reduce the rate of energy transfer from your home		
15	...explain what cavity wall insulation is		

Keywords:

Thermal conductivity
Infrared radiation
Black body radiation
Specific heat capacity
Insulation

Exam insights: