Key Word	Definition	Explanation
Bright or shiny surfaces	A material which allows heat energy to pass well by conduction.	All objects absorb and emit this kind of radiation. The hotter an object, the more IR radiation it emits in a given time.
Conduction	A material which does not allow heat energy to pass well by conduction.	Bright (white) or shiny surfaces reflect more radiation than they absorb, keeping the object cool.
Conductor	How hot or cold something is.	Dark or dull absorb more radiation than light, shiny surfaces and heat up more quickly. They also emit radiation more quickly so they lose heat and cool down more quickly.
Convection	The process by which thermal energy moves from one place to another	If there is a difference in temperature between 2 places, heat will move. Thermal energy always moves from hotter to cooler areas.
Heat transfer	These are good abosrbers and emitters of heat radiation	Liquid and gas particles can move around. Hot particles rise and cooler particles take their place to form a convection current.
Infrared radiation	These are poor abosrbers and emitters of heat radiation, but are good reflectors of radiation	The particles of the material are far apart. Non-metals are the best insulators.
Insulator	This is the full name of heat energy as waves	The particles of the material are very close together so that heat energy can be passed from particle to particle. Metals are the best conductors.
Matt or black surfaces	Type of thermal energy transfer which does not need particles.	Thermal energy travels as waves.It travels at the speed of light.It can travel through a vacuum.This is the only way heat can reach us .
Radiation	Type of thermal energy transfer which occurs in liquids and gases	Vibrating particles pass on kinetic energy to neighbouring particles. This eventually results in a rise in temperature at the other side of the solid.
Temperature	Type of thermal energy transfer which occurs in solids	When something has a higher temperature the particles in the object move faster. The speed of the particles is linked to the temperature.