Energy Audit - Worksheet

Reading your meter (see Appendix 1)
Keep a weekly record of you electricity and gas meter readings

- Make sure to take the reading at the same time every week
- Keep all your readings in a safe place
- Make a note of an events that may have increased your usage

Date	Meter reading	Date	Meter reading

Analysing Energy Bills
Fill in the tables using the information from your meter readings and the school energy bills

Electricity

From	To	KWh of energy

Heating

From	To	KWh (gas) or Litres (oil) of energy

What kind of energy and how many units were used per year?

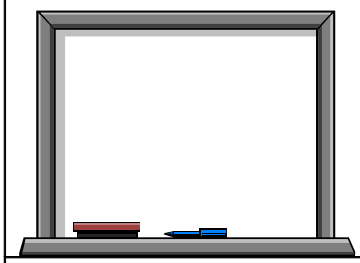
	Amount
Electricity (KWh)	
Gas (kWh)	
Oil (Litres)	

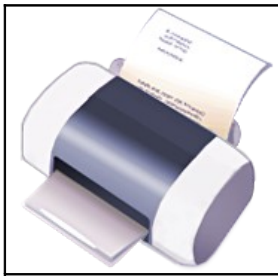
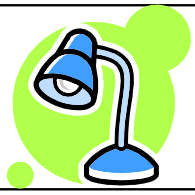
Did any of the energy come from renewable sources?

Time Period	From	To	Total % renewables

What uses Energy in our school?
Complete the tables below for the different areas of your school

Electricity

Light bulbs 	Number of Lights	Number left on
Computer Monitors 	Number of Monitors	Number left on or on standby
Computers 	Number of Computers	Number left on or on standby
Interactive Whiteboards 	Number of whiteboards	Number left on or on standby
Photocopiers / Printers	Number of Printers /Photocopiers	Number left on or on standby

		
Desk lamps 	Number of Desk Lamps	Number left on
Televisions 	Number of Televisions	Number left on or on standby
DVD / Video Players 	Number of DVD /Video players	Number left on or on standby

Heating temperature

	Location	Temperature in °C
Heating	Classrooms / Study rooms	
	Halls / Corridors	
	Gym / Sports Hall	
	Changing Rooms	

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Energy loss

Windows	Is the heating on?	Total number of windows?	Total number left open?
Doors		Total number of doors?	Total number left open?
	Internal		
	External		
Radiators		Total number of radiators?	Total number of radiators obstructed?

Health and Safety!

When doing your checks

- Do not plug in or unplug any electrical appliances
- Do not touch any of the electrical appliances
- Do not adjust any heating equipment

Climate change word bank

Air pollution – Chemicals, smoke and particles that can make the air harmful to breathe.

Carbon Calculator – A way to measure the carbon dioxide released because of your energy use or other habits. The bigger your footprint, the more you add to global warming.

Carbon Dioxide (CO2) – A colourless gas that is naturally present in the air. Plants absorb carbon dioxide, while animals breathe it out. It is produced when fossil fuels are burned. This extra carbon dioxide in the atmosphere causes climate change.

Climate Change or **global warming** - Warmer temperatures caused by extra heat being trapped in the atmosphere. This is due to more carbon dioxide and other gases being produced.

Fossil Fuels – Substances made from dead plants and animals that were buried million of years ago. Coal, oil and gas are fossil fuels.

Fumes – A gas or a smoke that can be unpleasant and suffocating.

Energy source – Where energy comes from. Coal is an energy source because we can burn coal to produce electricity. Other sources of energy are oil, gas, sunlight, water and wind.

Greenhouse Gases – Gases in the atmosphere that trap heat and keeps the Earth warm. Without these gases our planet would be far too cold for life to survive. But too much of them is causing global warming.

Hydropower or hydroelectric power – Electricity made by using water trapped behind a large dam.

Icecap – Ice that covers a huge area of land. If the temperature of the earth rises then ice caps may melt. This will make sea levels rise and cause flooding around the world.

Land contamination – When land becomes spoiled and polluted by chemicals.

Non-renewable energy sources - These cannot be replaced once they are used. Coal, oil and gas are non-renewable energy sources. They take millions of years to form, but we have nearly used them up in a short time.

Oxygen – A colourless, tasteless gas that makes up 20% of the air that we breathe. Plants produce oxygen and add it to the atmosphere. Without it, human beings and animals could not survive.

Power Station – Where electricity is made. This is normally done by burning fossil fuels. This heats to water to create steam. This turns large turbines that generate electricity.

Renewable energy sources – These sources of energy do not run out. For example, sunlight, wind and waves.

Wind turbines – these are large wind-powered blades on a tall pole. When the wind turns the blades, this turns a generator that makes electricity.

Data collection word bank

Energy bills – a letter that comes from your electricity, gas or oil supplier. This tells you how much energy you have used and how much you must pay for it.
Kilowatt hours – energy is measured in kilowatt hours and people pay for the number of kilowatt hours they use.
Unit – gas is often measured in units instead of kilowatt hours. A unit is about 31.3 kilowatt hours.