

Non-Renewable Energy

Natural Gas



This fossil fuel is a mixture of gases which you cannot see, taste or smell. It is burned to create energy, releasing carbon into the atmosphere.

Coal



Coal was formed millions of years ago from plants. It is a shiny, black rock mined from underground and then burned for energy. It is a fossil fuel that creates air pollution.

Petroleum



A liquid found underground which we sometimes call oil. Oil can be thick and black or watery. It is burned to create energy, releasing carbon into the atmosphere.

Uranium



Uranium is a mineral found in rocks underground. We split uranium atoms to release energy in nuclear power plants.

Renewable Energy

Dams



Dams trap water from seawater at high tide and from rivers. Turbines are turned when the water is released.

Solar Panels



Solar panels catch energy from the sun's rays and turn into electricity.

Wind Farms



Huge windmills are placed in areas of strong winds such as marshes or on the top of hills. The wind turns the blades, which creates electricity.

Geothermal



Geothermal energy is thermal energy generated and stored in the Earth. Water and/or steam carry the geothermal energy to the Earth's surface.

POLLUTION

Pollution is something introduced into the environment that is dirty, unclean or has a harmful effect. Air, water and land can all become polluted.

For example, traffic fumes cause air pollution, factories or farming can put chemicals into rivers and litter/plastic can create land pollution.

Natural Pollution

Much of the damage caused to the environment is caused by human activity but some is created naturally.

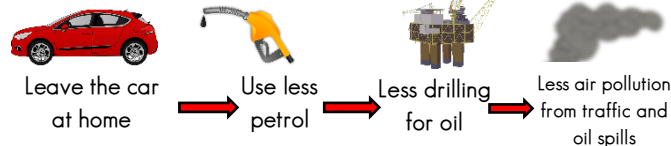
Volcanoes - Pollutes the air with dust and poisonous gases

Methane - Production/transport of coal, gas and oil, as well as produced by animals, traps heat adding to climate change.

Radon - Radioactive gas found in igneous rocks and soil

Fires - Smoke filled with carbon dioxide and small particles

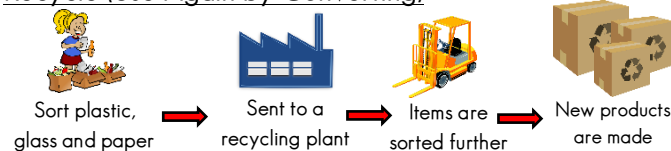
Reduce (Use Less)



Reuse (Use Again)



Recycle (Use Again by Converting)



Key Vocabulary

acid rain	Wind carrying nitrogen and sulphur pollution can fall to the ground as rain, killing trees and poisoning lakes.
biodegradable	rotting away naturally from bacteria
chemicals	substance that has been made or purified
ecosystem	community of living and non-living things all linked together in a habitat
energy	power created from a resource
fossil fuel	natural fuel formed in the past from the remains of living organisms
greenhouse effect	the trapping of the sun's warmth in a planet's lower atmosphere causing a rise in temperature
incinerator	apparatus for burning waste material
landfill	a huge rubbish dump filled with waste
litter	throwing waste products onto the floor
noise & light	pollution caused by too much noise or light
non-renewable	resources used for energy which will run out
renewable	resources used for energy which will not run out
smog	Fumes from traffic and industry create a thick fog

How long does waste last?

banana peeling (2 weeks)



newspaper (1 month)



cardboard (3 months)



plastic bag (20 years)



tin can (50 years)



plastic bottle (450 years)



chemicals (1000s of years)



nuclear waste (10,000 years)



glass bottle (millions of years)

