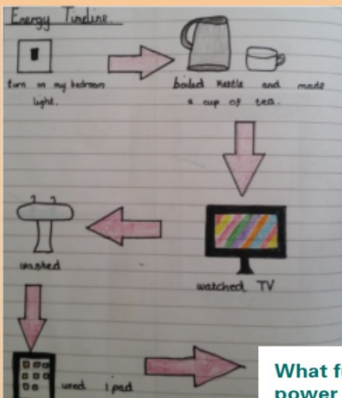


Do you remember doing our Sunny Schools topic last half term? It was part of your home learning. We also looked at how we create energy in DGR that week.

Here are some pictures to remind you.



Problems with power stations



Courtesy of Sunflower / Brian Litzberger

- Power stations cause pollution. They make the air dirty. Pollution is bad for our planet. It can kill plants and animals. can also make people sick.
- But power stations are cleaner than they used to be, and there are ways to make them cleaner still.
- Gas and oil are running out, and coal will run out in about 200 years! We need to find different ways to make electricity. ~~electricity.~~ **electricity.**

What fuels are used inside a power station?

Most power stations in the UK make electricity by burning **fuel**.

The fuels they burn are **coal, gas or oil**.



How is electricity made?



- The fuel is burned to make **steam**.
- The steam turns a machine called a **generator**, like the one in this picture.
- The generator makes **electricity** when it turns very quickly.

What is climate change?

Even though the climate of the whole world can change, scientists are worried that over the last hundred years, the **average** temperature of the world has got **much warmer very quickly**. Scientists refer to this as climate change.



So what **causes** this to happen?

What **effect** does climate change have?

The earth becoming hotter is called global warming.

This week we are doing a Design and Technology project that is linked to our Sunny Schools topic. You have to design and build an eco house.

What do you think an eco house is?

It is house that reduces the amount of damage on the environment. It reduces your carbon footprint and uses sustainable energy.

The amount of carbon dioxide that is produced, which damages the Earth.



Energy that does not run out
eg
solar power
wind power



Step 1

Collecting ideas

Here are some suggestions about what you could include in your eco house.

Solar powered lighting



Passive solar lighting

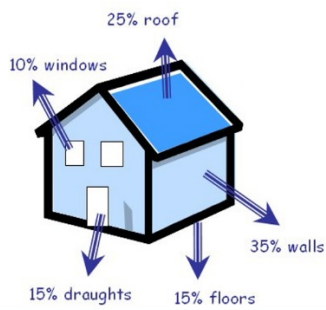


South-facing home making use of natural light.

Lots of windows to let in natural light.

Insulation stops heat from escaping from the house to save energy

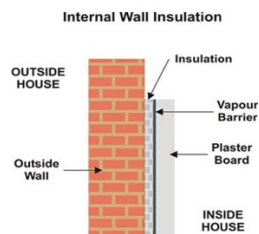
Insulation



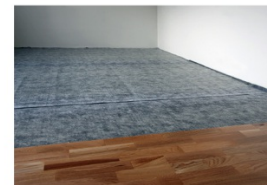
Loft insulation



Wall insulation



Floor insulation



Double glazed windows



Draught proofing



Rainwater collector



Collect and use
rain water

Recycling boxes



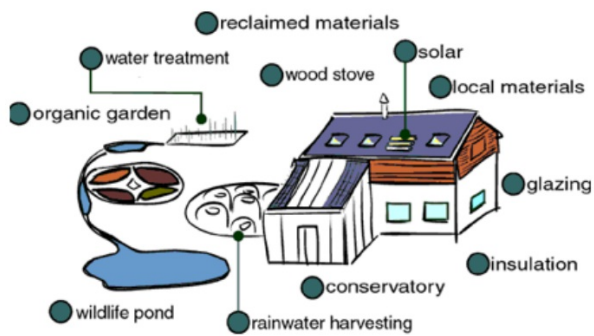
Collect and use
food waste

Compost bin



Step 2

Use the internet to research eco houses that have been built before.
Here are some teacher examples:



Either sketch some ideas or copy and paste from the internet.

