

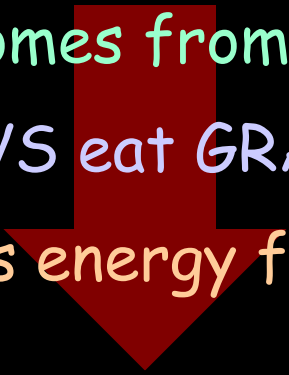
Energy Resources

The ULTIMATE energy source

The sun is the ultimate source of all our energy.

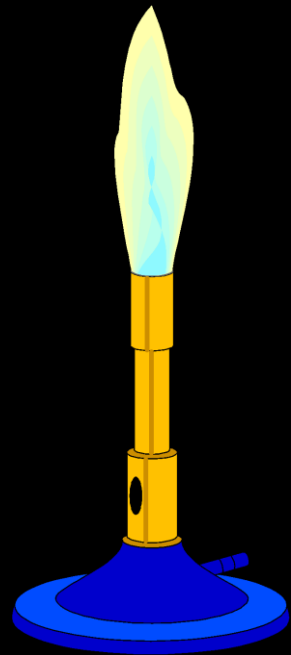
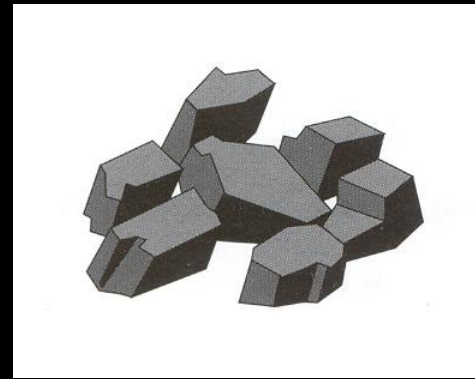
For example, we often get energy from beef:

BEEF comes from COWS,
COWS eat GRASS,
GRASS gets energy from the sun



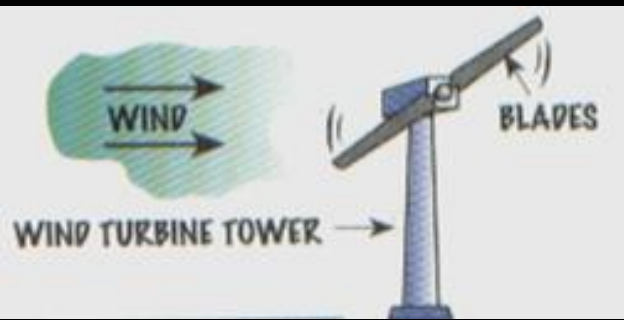
Fuels

A "fuel" is something that can be burned to release heat and light energy. The main examples are:

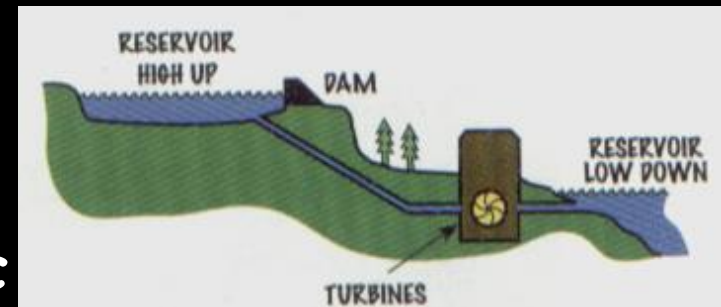


Coal, oil and gas are called "fossil fuels". In other words, they were made from fossils.

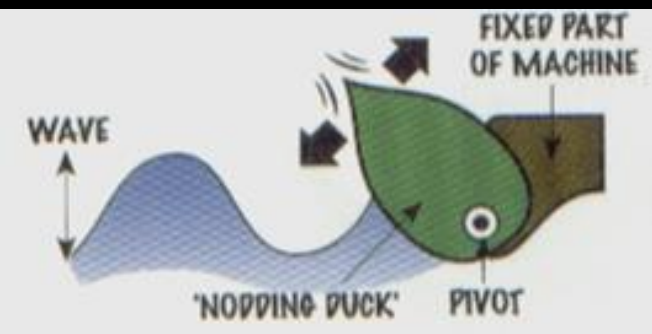
Renewable energy sources



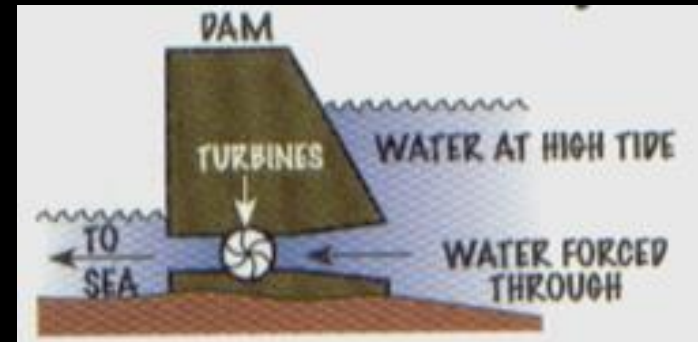
Wind



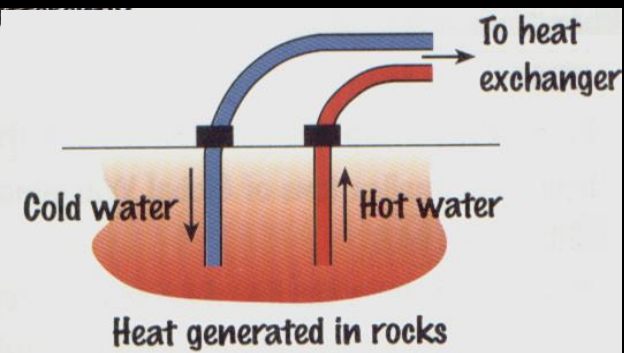
Hydro-electric



Wave

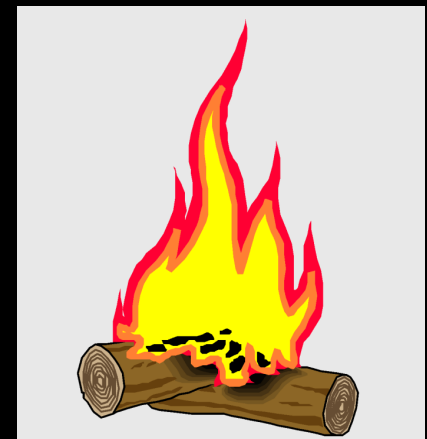


Tidal



Geothermal

Biomass



Renewable vs. non-renewable fuels

A _____ energy source is one that can be _____ ("renew = make again"), e.g. _____, solar power etc. Biomass is also an example of a renewable energy source - _____ is a form of biomass.

A _____ energy source is one that when it has been used it is gone forever. The main examples are _____, oil and gas (which are called _____, as they are made from fossils), and nuclear fuel.

Words - non-renewable, coal, wind, renewable, fossil fuels, wood, renewed

Non-renewable energy sources

Advantages

Cheap fuel costs

• Generate a lot of energy

Easy to use

Coal, oil, gas and nuclear

Disadvantages

Pollution - CO_2 leads to global warming and SO_2 leads to acid rain

Fuel will run out

Renewable energy sources

Advantages

Clean

Won't run out

Easily accessible

Wind, tidal, solar etc

Disadvantages

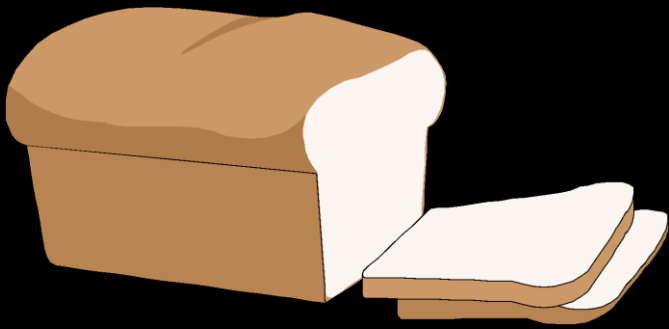
Often depend on the weather - is it sunny???

Look ugly

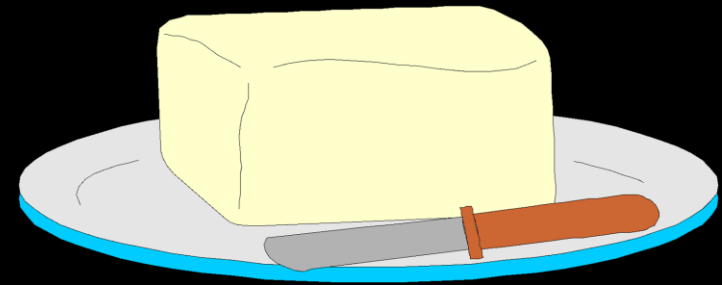
Energy is "dilute"
- in other words,
it's very spread
out

Food

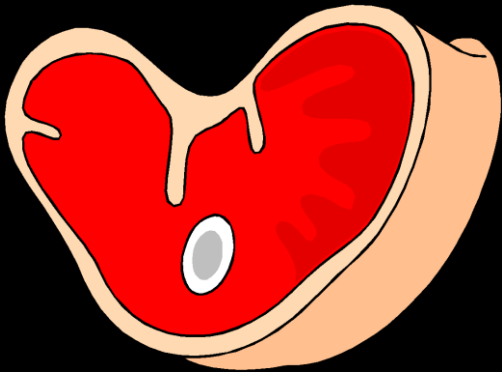
Food is an energy resource. The amount of energy it contains is measured in "kilocalories" (KCal). For example, consider 100g of the following:



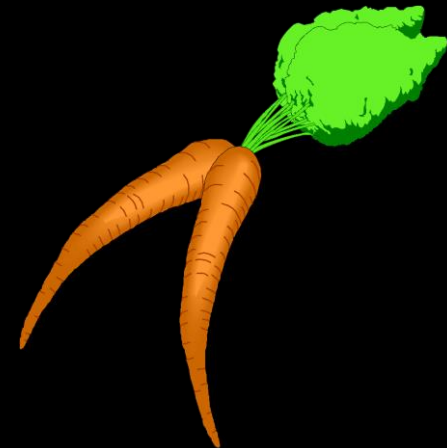
230 KCal



760 KCal



160 KCal



35 KCal