

WEEK 1 & 2 - The Greenhouse Effect

1. Natural Greenhouse Effect	When the Sun's energy reaches the Earth's atmosphere, some of it is reflected back to space and the rest is absorbed and re-radiated by greenhouse gases.
2. Solar Radiation	The light and heat energy emitted by the sun.
3. Greenhouse Gas	A gas that contributes to the greenhouse effect by absorbing infrared radiation, e.g. carbon dioxide, nitrous oxide and sulphur dioxide.
4. Global Warming	An increase in the average temperature of the Earth's atmosphere and its oceans, caused by the human enhanced greenhouse effect.
5. Fossil Fuel	A natural fuel such as coal, oil or gas, formed in the geological past from the remains of living organisms.

In WEEKS 5 & 6 and the THRESHOLD CONCEPTS section there are no specific key terms, just factual information that you need to know well.

Testing yourself is a REALLY good way of learning key terms.

Examples of how you could set questions in weeks 5 and 6:

- Name two arguments FOR building wind turbines.
- How much colder would it be without the natural greenhouse effect?
- Which types of locations are best for wind turbines?
- What are three advantages of wind turbines?

Is the answer blowing in the wind? https://quizlet.com/_6f474u

WEEK 3 & 4 - Energy

1. Non-renewable	Energy sources that will run out or will not be replenished in our lifetimes.
2. Renewable	Energy sources that are collected from resources which are naturally replenished on a human timescale.
3. Nuclear Energy	The use of nuclear reactions that release nuclear energy to generate heat, which most frequently is then used in steam turbines to produce electricity in a nuclear power plant.
4. Hydroelectric Power	Flowing water creates energy that can be captured and turned into electricity.
5. Geothermal Energy	Energy generated by heat stored deep in the Earth.
6. Wind Energy	Electrical energy obtained from harnessing the wind with windmills or wind turbines.
7. Solar Energy	The Sun's energy exploited by solar panels to heat water or air or to generate electricity.
8. Biomass Energy	Renewable organic materials, such as wood, agricultural crops or waste which are burned as a source of fuel.

WEEKS 5 & 6 - Wind Farms Are Controversial

FOR

AGAINST

Wind energy does not create any air pollution.	The tall masts and rotor blade can ruin the view / landscape.
Once built, the turbines produce cheap electricity.	The turbines are very expensive to make and build.
Many jobs are created in designing, manufacturing, building and maintaining the turbines.	The wind turbines do not work when it is not windy!
Farmers can benefit through selling or letting their land to electricity companies.	The humming noise created by wind turbines spinning can give people living nearby a headache.

THRESHOLD CONCEPTS

The greenhouse effect is a natural process which we depend upon. Without it the average global temperature would be 33°C colder.
Human activity is making the natural greenhouse effect worse which is in turn causing global warming.
Fossil fuels are non-renewable – this means that they will eventually run out.
Wind turbines do not make wind! They use the power of the wind to create electricity. This is why they are located in windy locations.