

Scientists made an alarming **discovery** in the 1980s. They found out that the **average** temperature of the Earth's **surface** was slowly rising. This trend is called global warming. Today we know that global warming is **increasing** because more and more gases get into the atmosphere.

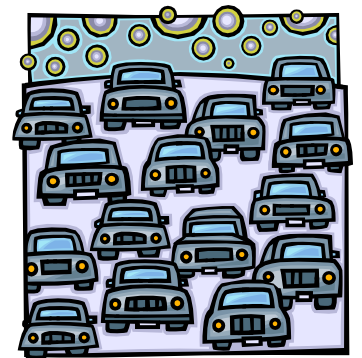


GREENHOUSE EFFECT

A greenhouse is a glass house in which plants grow. The glass lets light in and at the same time keeps heat from getting out. This heat keeps the plants warm, even when it is cold outside. The same happens to the Earth's atmosphere. It lets sunlight in and keeps **carbon dioxide** and other gases from getting out. We need these gases but too much of them **trap** more heat.

CAUSES

For a long time people on our Earth didn't think a lot about greenhouse gases. The situation changed when people started using more and more energy in the form of **fossil fuels**, like oil, gas and coal. We burn **fossil fuels** to **power** factories, run cars, produce **electricity** and heat houses. As **fossil fuels** burn they let **carbon dioxide** into the atmosphere.



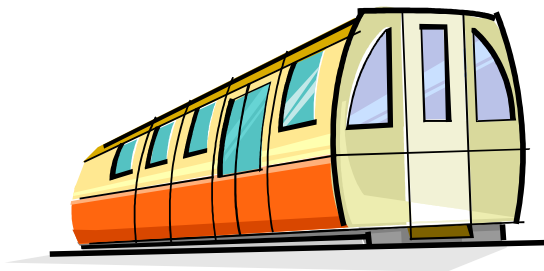
During the last few **decades** people have also cut down many forests. Trees use **carbon dioxide** when they make their own food. Fewer trees mean that **less carbon dioxide** is taken out of the atmosphere.

POSSIBLE EFFECTS OF GLOBAL WARMING

Scientists have different opinions on how warm the Earth's **surface** will really get. The **increase** may be between 1.5°C and 6°C by the year 2100. Warmer weather will make **ice caps** and **glaciers melt**. **Sea levels** could rise dramatically. Plants, animals and people living in coastal areas all could be in danger. The weather may change in many areas of the world. **Floods**, **droughts** and damaging storms could be the result.

People in colder regions might welcome warmer weather but those who live in regions that are already hot may **suffer** from new **diseases**. At the same time some animals may not **survive** because they cannot **adapt** to the new **environment**. They could move to other places in order to live there.

REDUCING GLOBAL WARMING



Finding a **solution** to solve the world's biggest **environmental** problem is not an easy **task**. **Although** we need energy to make our **economy** grow there are things that could be done to fight off this problem. **Carpools** or travelling by **public transport** could take many cars off the roads. You could turn off lights, TV sets, computers and other electrical **items** if you don't need them. Companies have been spending a lot of money to produce items that use little energy.

We also need to use more alternative energy, like sunlight, wind power or **wave** power. Car companies have started to produce a new type of cars known as **hybrids**. It works like an electric car but also has a small **petrol** engine.

THE KYOTO PROTOCOL

In 1997 over 150 countries **signed** the Kyoto Protocol at the United Nations Climate Conference. Industrialized countries should **reduce** their **emissions** of greenhouse gases. The United States which produces about 25 % of all greenhouse gases has often made **public** that it will not **support** the **agreement**.

WORDS

- **adapt** = to get used to a new situation
- **agreement** = when two or more people, groups, companies or countries promise to do something
- **although** = while
- **average** = normal, usual
- **carbon dioxide** = the gas that is produced when animals breathe out or when carbon is burned in the air
- **carpool** = a group of people who travel to work together in one car
- **cause** = reason
- **decade** = ten years
- **discovery** = if you find out something that nobody knew about before
- **disease** = illness
- **drought** = a long period of dry weather when there is not enough water for plants and animals to live
- **economy** = the financial system of a country; the system that a country has of producing and selling goods
- **electricity** = the power that is in wires and cables. It is used to give us light, heat and make machines run.
- **emission** = gas that is sent into the air
- **environment** = the world around us
- **flood** = when it rains a lot and water covers land that is normally dry
- **fossil fuel** = a form of energy like coal and oil that was produced millions of years ago from dead plants and animals
- **glacier** = a large mass of ice that moves slowly down a mountain valley
- **heat** = warmth; when something is hot
- **hybrid** = here: a car that runs with two forms of energy
- **ice cap** = thick ice that always covers the North and South Poles
- **increase** = to go up
- **item** = thing, object
- **melt** = to become liquid
- **petrol** = the liquid that you get out of petroleum; it is used to make cars run
- **power** = to give energy to a machine
- **public** = here: to let everyone know
- **public transport** = buses, trains, trams that everyone can use
- **reduce** = to lower, if something goes down
- **scientist** = a person who is trained in science
- **sea level** = the average height of the sea; from here mountains, cities and other natural places are measured
- **sign** = to put your name on a document
- **solution** = answer
- **suffer** = to be ill with
- **support** = to agree to something or help
- **surface** = the top layer of something
- **survive** = to continue to live and not to die
- **task** = job; something to do
- **trap** = to keep in and not let out
- **wave** = a line of water that moves across the surface of the sea

