



Assembly plan 1:

What is Carbon Dioxide and how can we help?

Resources needed:

Flipchart and pens, lap top and power point

Question 1: What is Carbon Dioxide does anybody know?

(Write down all answers on flip chart)

Answer: Carbon Dioxide is one of the natural gases found in the air around us. It is here right now but we cannot see it or smell it.

Question 2: What causes Carbon Dioxide? Does anybody know?

Answer: Carbon Dioxide is naturally produced by plants and animals during respiration. Human activity has changed the concentration of gases in the atmosphere in two ways. First of all we have cut down lots of trees to develop land for food. Trees absorb carbon dioxide so, with fewer trees, more carbon dioxide builds up in the air around us. Also, the agriculture that replaces the forests can often be a source of emissions.

We also burn something called fossil fuels. Can anyone tell me what fossil fuels are and what we use them for?

Coal, oil and gas are called "fossil fuels" because they have been formed from the organic remains of prehistoric plants and animals. We use them for energy to heat our homes and drive vehicles as just a few examples. Unfortunately burning fossil fuels produces about 6.5 billion tonnes of carbon dioxide into the atmosphere each year.

As a result the **earth is getting warmer** because of a build up of gases in the atmosphere. These gases trap heat from the sun. The most important gas is carbon dioxide.

This video will hopefully explain a bit more. http://www.climatechallenge.gov.uk/multimedia/cc_psf5453_120_high.wmv

Question 3: Does anyone have any ideas on how we, as a school might be able to help to reduce the amount of Carbon Dioxide we produce?

(Write down all answers on flip chart)

Answer: One of the things we might be able to do is walk or cycle to school. The most recent figures show only 49% of primary school pupils walk to school, and only 44% of secondary school pupils walk to school.

The school run is estimated to be responsible for over 2 million tonnes of CO₂ emitted each year (Sutton Trust) – which is more than the annual CO₂ emissions of the Bahamas. (UN Millenium Indicators)

Question 4: How many people drive to school?
(ask pupils to stand up for each question)

Question 5: How many people cycle to school?

Question 6: How many people go by bus?

Question 7: How many people walk to school?

Question 8: Any others? Does anyone go by balloon?

Question 9: What are the largest?

Question 10: What are the smallest?

Question 11: If it is practical to walk and cycle but people don't for some reason ask the pupils in the assembly why they think this might be.

(Write down all answers on flip chart)

Answers may include

I live too far away
Driving is much quicker
There is too much traffic and it is dangerous to walk to school
Some motorists drive too fast
The pavements are dirty

Question 12: If no pupils walk or cycle, ask them what the benefits might be of walking and cycling.

(Write down all answers on flip chart)

Answers may include

A good way to learn road safety
Cuts down on the number of cars on the road
Keeps you fit