

# THE WOOD AND THE TREES

... and the air that we breathe

**ATMOSPHERE - AIR**

**PHOTOSYNTHESIS**

Trees need food to grow and remain healthy just like us. Their food is made in the leaf which becomes the wood in the tree. This process is known as photosynthesis and needs energy from the sun to take place.

Each tree leaf has molecules known as chlorophyll which give leaves their green colour. These convert water (H<sub>2</sub>O) from the roots and carbon dioxide (CO<sub>2</sub>) from the air into food while breathing out clean oxygen.

**SUNLIGHT**

**FOOD - WOOD**

**SOIL - NUTRIENTS**

**SOIL - WATER**

**ROOTS**

For every tree felled in Ireland, three are planted

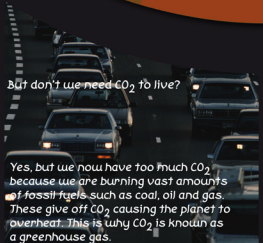
Roots take up nutrients and water as well as supporting the tree

Why are trees known as the lungs of the planet?

Any other reasons for using wood?



because they absorb (sequester) CO<sub>2</sub> from the atmosphere and breathe out clean oxygen while storing the carbon in the wood.



But don't we need CO<sub>2</sub> to live?

Yes, but we now have too much CO<sub>2</sub> because we are burning vast amounts of fossil fuels such as coal, oil and gas. These give off CO<sub>2</sub> causing the planet to overheat. This is why CO<sub>2</sub> is known as a greenhouse gas.



What can we do to reduce CO<sub>2</sub>?

We can plant more trees, which is good for the environment. More trees also mean we can use more timber in our buildings and we can reduce our dependency on fossil fuels by using renewable wood energy.



Wood is the most environmentally friendly material in the world. There is no waste in wood. After it is sawn for building, furniture, fencing and other uses, the remaining waste wood is converted into panel boards, paper and products for heating buildings while the bark is used for gardening.