## It's Valuable Soil... not unwanted dirt!



#### How much do you know about the soil you are treading on?

See if you can answer the following questions and learn a bit more about how important soil is to our lives and the environment

#### FOOD FROM SOIL

All food crops grown rely on the soil. Even the farm animals have grown by eating grain or grass that has grown from soil! Crops need lots of things to grow – which of the following do you think the soil provides?

Nutrients, such as nitrogen

Carbon dioxide

Water

Light energy A firm foundation

### SOIL AND LIFE ON EARTH

You will have heard about climate change and the build up of carbon dioxide in the atmosphere. Soil helps to limit climate change by storing carbon in the form of organic matter – try to answer the following questions.

1) Plants take in carbon dioxide from the air to form the sugars by which they grow leaves, roots and stems. What is the main process by which this happens?

Part of the answer is filled in for you CLUE

synthesis

2) When a plant dies, it is eaten by microscopic animals living in the soil. What does it become? (Tick the right answer)

**Rubbish** 



Soil organic matter

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3) Worldwide, soil stores three times more carbon than all the plants growing on our planet. Scientists have estimated that there are 15 gigatonnes of carbon in the world's soils. The number has a lot of noughts when it is converted to tonnes - have a go at filling them in.

Worldwide, soil stores 15, 0..... tonnes of carbon

**DID YOU LIKE THESE FACTS?** WE WOULD LOVE TO HEAR FROM YOU!

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ook at the photo

CLUE

### **SOIL AND OUR RIVERS**

Rain falling from the sky lands on soil before it becomes river water where fish live. The soil influences both the amount and healthiness of the water in our rivers. Soil in good condition acts like a giant sponge it absorbs all the rainfall and then releases it gradually, maintaining river flows through the summer.

What do you think happens to people who live near rivers when soil doesn't absorb the rain that falls?

#### LIFE IN SOIL

An enormous number of different animals and micro-organisms live in soil. It is all these animals and microbes that help it support life on earth. **Indicate below which you think live ALL (put an A), PART (put a P) or NONE (put an N) of their lives in soil.** 



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