5 Back to nature

AIMS: Vocabulary related to the natural world • Linking words • Skim-reading • Completing and labelling diagrams

Part 1: Vocabulary



1 .....



2 .....



3 .....



4 .....

1 **The following words refer to the natural world. Use the words to label the pictures above.**

bay valley cliff waterfall

2 **These words sometimes refer to similar things, but they are not interchangeable. In the sentences below, there is only one correct choice. Complete the sentences with the words in the box.**

soil sand land ground

1 The house we are buying comes with a lot of ..... .
2 Children love playing in the ..... .
3 There were no chairs in the hall so we all sat on the ..... .
4 I have bought a big bag of ..... so I can do some planting in the garden later.

3a **Read the following texts, without using a dictionary. Underline all the words that refer to the natural world, and highlight all the linking words.**

Our knowledge of Natural History would not be what it is today without the work of women explorers, artists and scientists. In this leaflet, you will learn about three British pioneering women, first to be involved in uncovering some of the rich history of the natural world.

Mary Anning (1799–1847)
Mary came from a poor family who lived in Lyme Regis, a coastal town in the South West of England. Her father tried to make extra money by selling fossils (remains in rocks) to rich tourists. Consequently, Mary and her

LIVEWORKSHEETS

siblings learned from an early age how to look for fossils, although she was the only one of the brothers and sisters who became an expert because she understood that fossils were of interest to geology and biology, not just tourism. However, in her lifetime she did not always get the credit she deserved, as it was male geologists who published the descriptions of any finds. Her important finds include the first skeleton of an ichthyosaur, or fish-lizard, a plesiosaur, also known as sea-dragon, and a pterodactyl, a 'flying dragon'.

Collecting fossils on the cliffs was dangerous work. Mary's dog Tray was killed when rocks and earth fell down a cliff, and she nearly lost her life in the same landslide, but in the end it was cancer that killed her when she was 47.

Dorothea Bate (1878–1951)
Born in the Welsh countryside, she had a passion for outdoor pursuits and natural history from an early age. She became the first female scientist in the Natural History museum in London. She was a palaeontologist, that is, a scientist who studies fossils in order to understand the history of life on earth. She went to mountains and cliffs in the Mediterranean and explored hilltops in Bethlehem, discovering and documenting animal fossils. She wrote hundreds of reports, reviews and papers.

Evelyn Cheesman (1881–1969)
Although Evelyn wanted to become a veterinary surgeon, this was not possible for women in the early 20th century. Instead, she trained as a canine nurse. Her first job, however, was not related to dogs: she worked in the insect house at the London Zoological society. She was very adventurous and went on many expeditions to remote locations, as far away as the Galapagos Islands. Despite being very busy, she managed to publish 16 books.

3b **Difficult words are often explained in texts. Find the explanations of the following words in the texts. The first one has been done for you.**

pioneering	Lyme Regis	fossils	siblings	ichthyosaur	plesiosaur
pterodactyl	Tray	landslide	palaeontologist	canine	remote

pioneering – first to be involved in

Watch Out!

The exact meaning of linking words is not always clear. For example, 'in fact' is not used just to introduce *any* facts; they have to be *surprising* or *contrasting* facts (in comparison to what has just been said).

✗ Many people argue as to who is more intelligent, women or men. In fact, a study found that women scientists were more intelligent than men in similar jobs.

✓ In the past, people thought that women were less intelligent than men, because of genetic differences. In fact, according to one study, women scientists were more intelligent than men in similar jobs.

4 **Do the following extracts use *in fact* correctly? Mark each extract with a ✓ or ✗.**

1 It is often believed that watching a lot of TV makes people see the world as a frightening place. In fact, evidence shows that watching TV makes no difference.

2 It is often believed that watching a lot of TV makes people see the world as a frightening place. In fact, there is some evidence that this is the case.

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Exam information | Completing diagram labels

In the exam, you may be asked to read a passage and use words from it to complete labels on a diagram or picture. The answers will often come from a particular section of the text and may not be in the same order as the questions.

1 **Skim-read the passage below and tick when you have found the sections that refer to:**

- what jellyfish look like ☐
- what barnacles are ☐
- how fossils are formed ☐
- how seashells are formed ☐

Part one: The beach, a natural treasure trove

Nature walks can be fun, energizing and educational at the same time. In Part One, we will look at what we can find on a marine *walk. In Part Two, we will discuss our fascinating forests.*

First of all, when you are walking on the beach you may be able to spot tracks. Birds and crabs leave footprints behind, especially in wet sand. On sandy beaches you will also be able to find interesting holes, made by crabs that were digging for food in the mud.

You may also come across jellyfish, as these are often washed up on the beach by the tides. They have no eyes, ears, heart or head and are mostly made of water. They look like a bag with arms, which are called tentacles. These contain poison, which helps them catch food. Even when they are out of the water or in pieces the tentacles may sting you, so they are best left alone.

Other animals you may find are coral and barnacles. The latter are marine animals that are related to crabs and lobsters and live in shallow waters. They like to attach themselves to hard materials, so you are likely to find them stuck to a piece of wood.

You may also see what look like small gelatinous blobs but are actually fish or worm eggs.

If you are lucky, you may find a fossil. In essence, this is an animal that died and got buried in a sea bed. They are likely to look like a piece of rock with an imprint of an animal skeleton. Their history is very interesting.

For an animal to become fossilized, it has to be buried in mud, sand or soil. If an animal dies but is not buried, it is more likely to rot away, be swept away by wind or water, and/or be eaten by another animal. Over millions of years, the animal remains become buried deeper and deeper; the mud, sand or soil compresses and slowly becomes rock. Their bone or shell starts to crystallize, because of surrounding minerals and chemicals. Ideally, the temperature stays relatively constant throughout this process. Sometimes the fossil dissolves completely and just leaves an imprint. At other times, waves, tides and currents slowly make the rocks erode, which allows the animal remains to break off, ready for you to find.

What you will definitely find a beach are shells. These were once the homes of animals such as snails, barnacles and mussels, consisting of a hard layer that the animal created for protection as part of its body. After the animal has died, its soft parts have rotted or have been eaten by other animals, such as crabs. What is left is a beautiful seashell for you to admire and take home if you wish.

LIVEWORKSHEETS

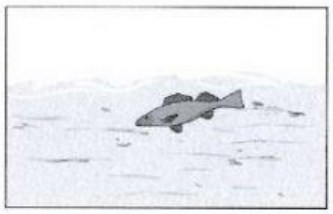
Exam tip

In the exam, you may have to complete labels of pictures, diagrams, flow charts, etc. so it helps if you can think visually. If you do not have a visual imagination, start practising by trying to visually represent written information where possible.

2 **Cover the diagrams below. Now try to make a drawing to represent the information in the paragraph about how fossils are formed.**

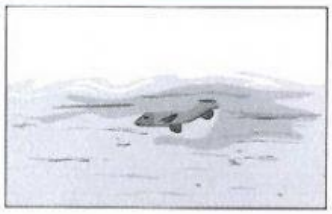
3 **Using NO MORE THAN FOUR WORDS from the passage, complete each gap in the diagram.**

a



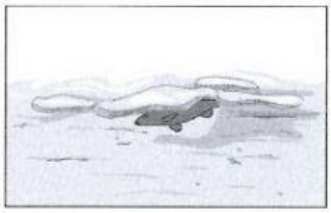
A dead fish is covered in (1) .....

b



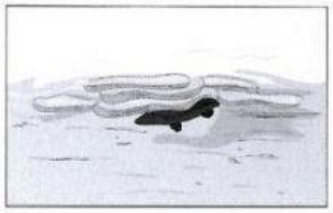
The fish goes (2) ..... into the soil.

c



The soil takes years to turn into (3) .....

d



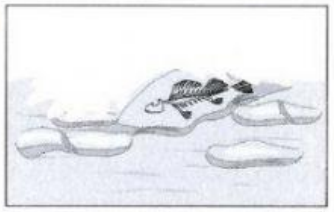
Minerals cause the fish to (4) .....

e



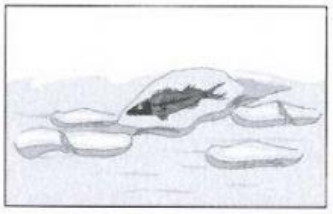
This (5) ..... happens over millions of years.

f



Rock erosion is caused by (6) .....

g



Fossil may (7) .....

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Part 3: Exam practice

Using NO MORE THAN TWO WORDS from the passage, complete each gap in the diagram.

The many uses of the Moringa tree

The Moringa tree, Saragwa, or Drumstick tree, is relatively unknown in the West, despite the fact that it is incredibly useful. Miriam Tayne reports about its culinary, medicinal and other uses.

The Moringa tree is a relatively small tree that typically grows to between three and ten metres tall. Its flowers are creamy-coloured and have been compared to small orchids. The plant has long and round green pods that can grow to 30 cms and which look a bit like drumsticks, hence the tree's common name. The pods consist of three parts, which contain round, dark brown seeds. Planting needs to be done in sandy or muddy soil, using these seeds or tree cuttings. The plant does not tolerate frost but thrives in hot climates. It is very common in South and South-east Asia, Africa and America.

The leaves are reputed to have anti-inflammatory and anti-bacterial properties, so are used for eye and ear infections, fevers, etc. They are also held against the forehead to reduce headaches, or made into tea to treat stomach complaints. As they contain a lot of iron they have been used for the treatment of anaemia, a medical condition in which there are too few red cells in the blood, causing tiredness. The plant also contains many other nutrients, such as phosphorus, calcium, potassium, and vitamins A and C.

The ground-up seeds are commonly used to treat certain skin infections, but can be used for much more. Ground seeds can be mixed with salt or oils to apply to the body to treat cramp, back ache and forms of arthritis, a medical condition in which the joints are swollen and painful. The oil, called Ben oil because it contains behenic acid, is also used as a hair treatment or a perfume, and to deter mosquitoes and treat their bites. The by-products of the oil manufacturing process are used for fertilization and water purification.

The roots work in exactly the same way as the seeds, but are much stronger, so are not used as often. They have additional uses for heart and circulation problems, whereas the gum is sometimes used to treat asthma. The bark has quite a pleasant taste and is sometimes eaten to encourage digestion.

The plant's main use is as food: for livestock, and for human beings, because it contains high concentrations of fibre and protein. The drumsticks are eaten in soup and/or as green beans, often in combination with shrimp (see picture), whereas the seeds are eaten like peas, or roasted. The leaves are eaten fresh or cooked in similar ways to spinach. Chopped, they are used as a garnish on soups and salads. They are often pickled or dried so that they are always available to use in sauces, stir-fries, soups and in sweet and sour or spicy curries.

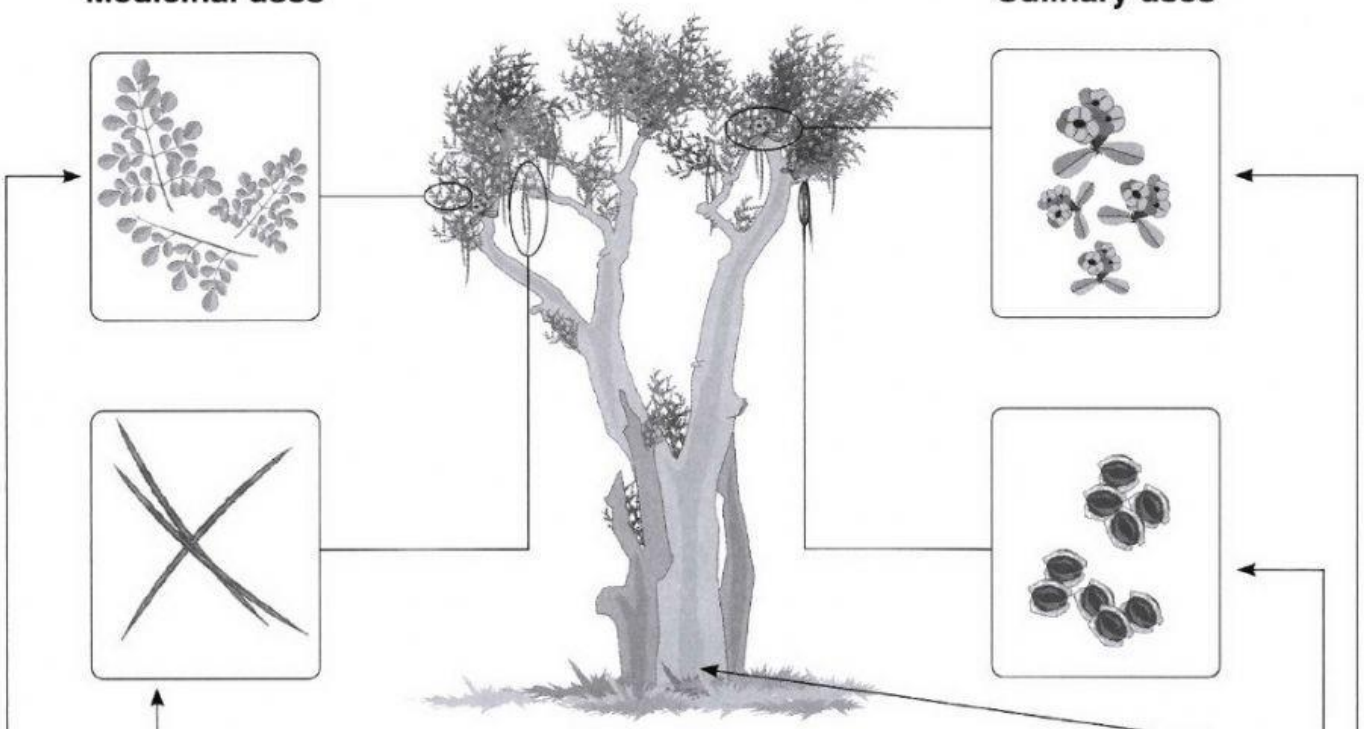
Like every other part of the tree, its flowers are not just decorative but also functional. They taste a bit like wild mushrooms and are considered a delicacy. They are used to make tea to treat the common cold, mixed with honey to make cough medicine, and made into juice to be drunk during breastfeeding as it is said to increase milk flow.



There is not a part of the tree that is not used. The Moringa tree is probably the most beneficial tree in the world.

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Medicinal uses **Culinary uses**



Moringa Tree

These so-called (1) ....., because of their shape, are actually (2) ..... which are eaten in similar ways to (3) ..... .

These contain vitamins, minerals and other (4) ..... .
They can be preserved in different ways, e.g. (5) ..... or (6) ..... .
In their whole form, they can be compared to another green leaf: (7) ..... .

These are used to treat arthritis and other aches as well as (8) ..... .
They can help relieve pain and the swelling of (9) ..... .

If eaten, this can aid (10) ..... .
Its taste is said to be (11) ..... .

These can be made into a liquid, taken by mothers to stimulate (12) ..... .
These flowers are considered a (13) ..... .

Progress check

How many boxes can you tick? You should work towards being able to tick them all.

Did you...

remember to skim-read to find the right section in the text? ☐
count your words to make sure you did not use too many? ☐
try to visualize the information while you were reading? ☐
look for the explanation of unknown words in the text? ☐

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