



CAMBRIDGE
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CAMBRIDGE **Primary Science**

Workbook 4

Fiona Baxter & Liz Dilley

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How to use this book

This workbook provides questions for you to practise what you have learned in class. There is a topic to match each topic in your Learner's Book. Each topic contains the following sections:

Focus: these questions help you to master the basics

Practice: these questions help you to become more confident in using what you have learned

Challenge: these questions will make you think more deeply

Focus

1 Match the bones of the skeleton with their functions. Draw lines from the names of the bones to their function. Different bones can have the same function, or more than one function.

Bone	Function
Skull	Support
Ribs	Movement
Arm bone	Protection
Spine	

Practice

2 Read the text about skeletons and answer questions about what you have read.

Our skeleton supports our body. It makes a strong frame inside the body. It gives our body shape and makes it firm. Our skeleton also protects organs inside the body.


We grow and get bigger because our skeleton grows. We begin to grow at birth. Our bones get longer and thicker each year. When we are about 18 to 20 years old, our bones stop growing.


Sometimes we fall or have accidents and break our bones. A broken bone is called a fracture. Doctors take special photos called X-rays to see if a bone is broken or not. The broken ends of the bone slowly grow back together again.


Challenge


3 Match the skeletons with the animals they come from. Write the letter of each skeleton next to the name of the animal it comes from.

Animal	Skeleton
Bird	
Rabbit	
Frog	
Crocodile	

A

B

C

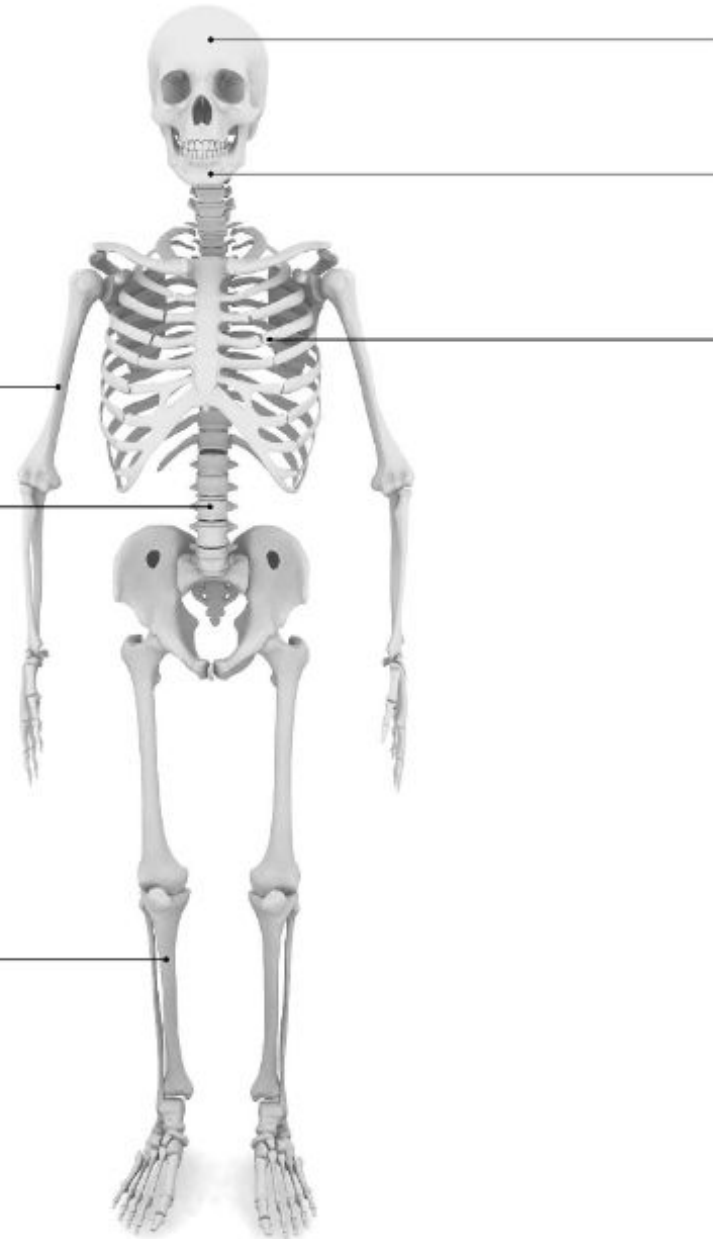
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> 1.1 Bones and skeletons

Focus

1 Use the words in the word box to label the skeleton.

rib cage arm bone
spine jaw
leg bone skull



Practice

2 a What are the bones of the head called?

b What are the bones of the chest called?

c What is the row of bones in our back called?

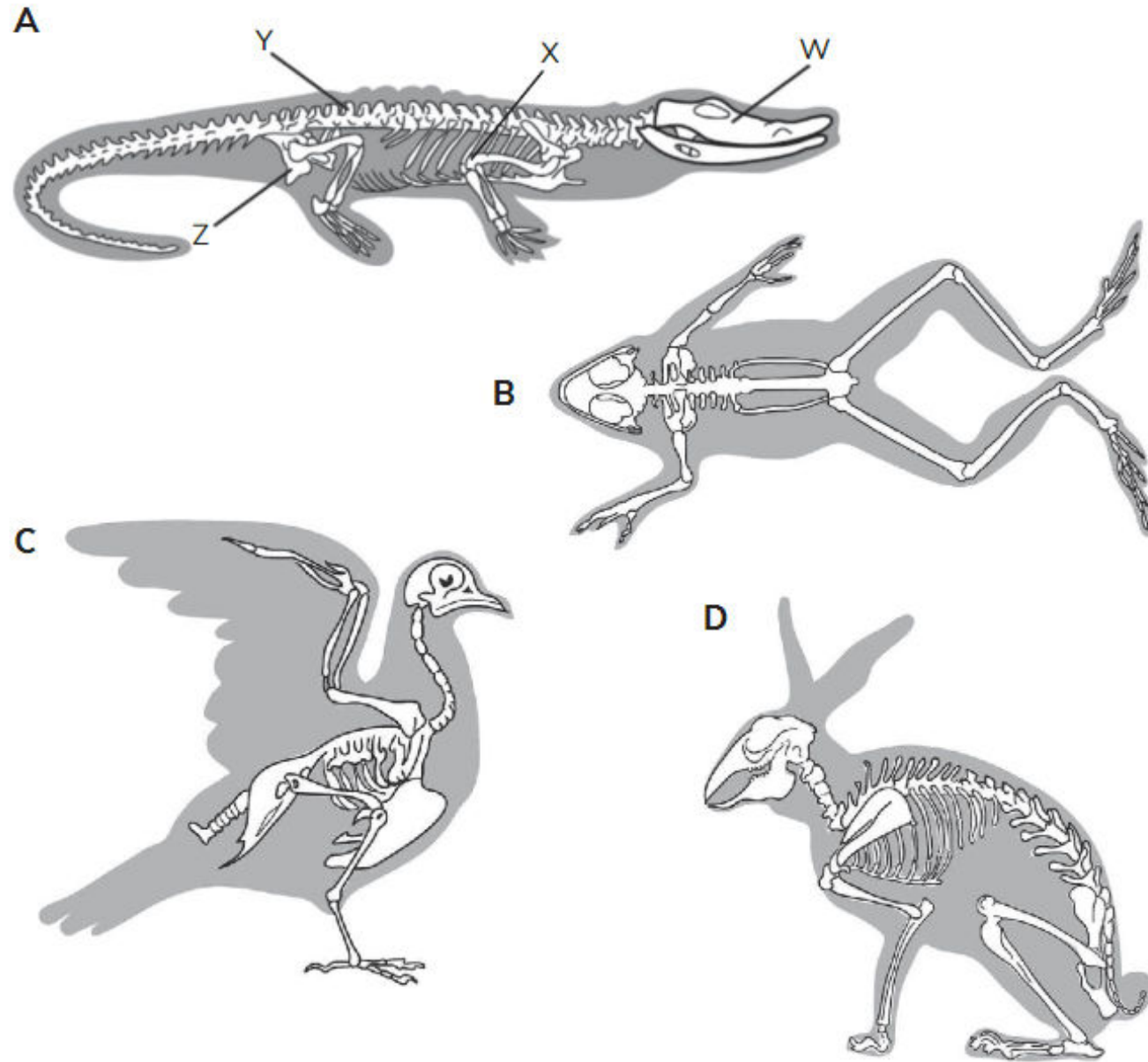
d Name the bone that moves when we chew food.

e Why do you think the bones of your skeleton are different shapes and sizes?

Challenge

3 Match the skeletons with the animals they come from.
Write the letter of each skeleton next to the name of the animal it comes from.

Animal	Skeleton
Bird	
Rabbit	
Frog	
Crocodile	



4 Name the parts on Skeleton A.

W is the _____

X is the _____

Y is the _____

Z is the _____

> 1.2 Why we need a skeleton

Focus

- Match the bones of the skeleton with their functions.
Draw lines from the names of the bones to their function.
Different bones can have the same function, or more than one function.

Bone	Function
Skull	Support
Ribs	Movement
Arm bone	Protection
Spine	

Practice

- Read the text about skeletons and answer questions about what you have read.

Our skeleton supports our body. It makes a strong frame inside the body. It gives our body shape and makes it firm. Our skeleton also protects organs inside the body.

We grow and get bigger because our skeleton grows. We begin to grow at birth. Our bones get longer and thicker each year. When we are about 18 to 20 years old, our bones stop growing.

Sometimes we fall or have accidents and break our bones. A broken bone is called a fracture. Doctors take special photos called X-rays to see if a bone is broken or not. The broken ends of the bone slowly grow back together again.

- a Name **three** reasons why a skeleton is important.

- b Explain what would happen to a baby if its skeleton did not grow.

- c What is a fracture?

- d How can doctors find out if a bone is broken?

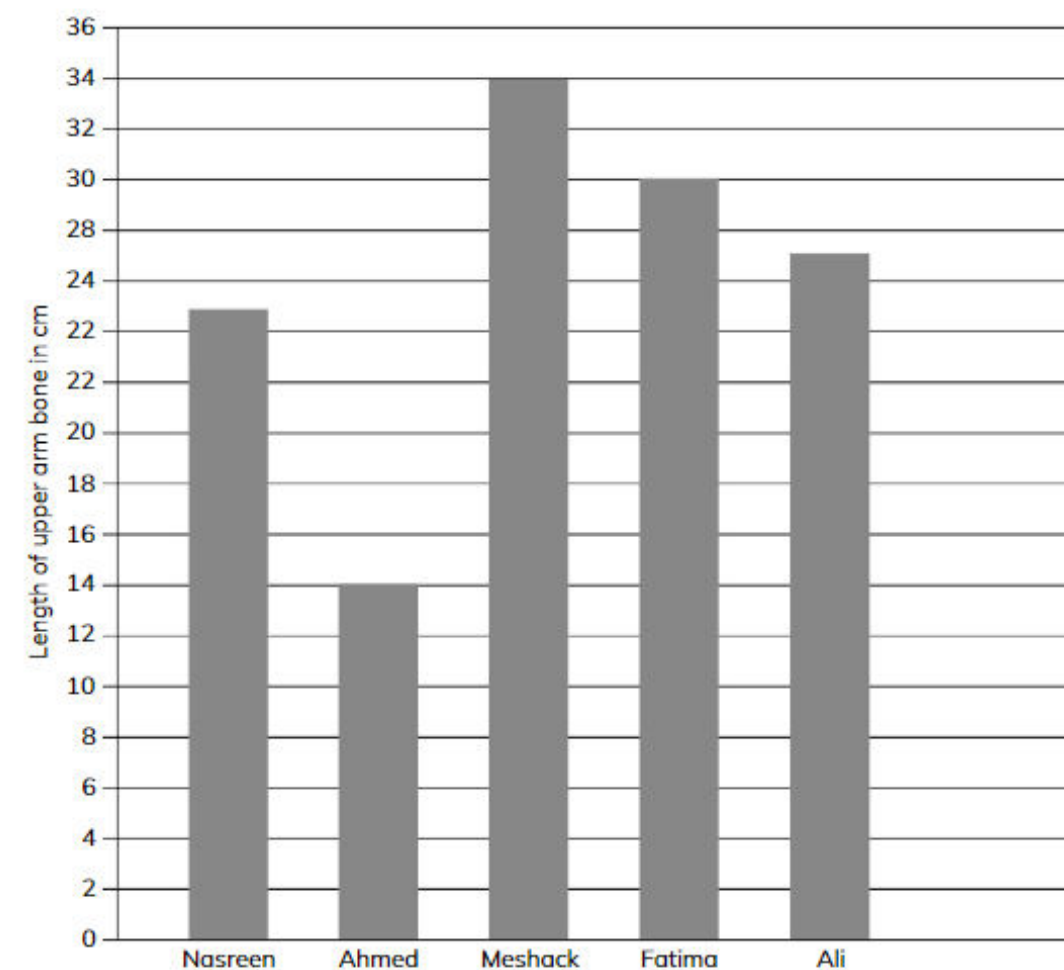
- e How do broken bones mend?

- f Why do you think some animals with skeletons are very big, but animals like worms are usually small?

Challenge

- 3 In this exercise you will find information from a bar chart.

Nasreen measured the length of the upper arm bone of some people in her family. She drew this bar chart to show her results. Use the graph to answer the questions.



- a Who had the longest upper arm bone?

- b How long is the shortest upper arm bone?

- c Nasreen's two brothers are Ahmed and Ali.
Which brother is the oldest? Explain your answer.

- d Put Nasreen and her brothers in age order. Explain your answer.

- e Who are Nasreen's parents?

- f Explain how you know this.

- g Which function of the skeleton does the graph show?

- h Nasreen has a baby sister, Meera.
Predict the length of Meera's upper arm bone.
Draw a new bar on the graph to show your prediction.

> 1.3 Skeletons and movement

Focus

- 1 Complete the sentences to explain how the muscles in your arm work. Use each of the words in the box once.

When I lift a weight, the muscle at the front of my arm

_____ and gets _____.

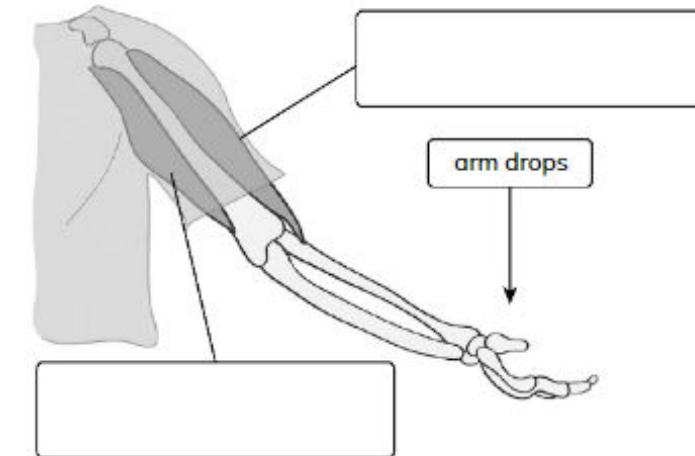
The muscle at the back of my arm _____

and gets _____. This shows that muscles

work in _____.

pairs	shorter
contracts	longer
relaxes	

- 2 Label the drawing showing the changes in the arm muscles when you lower your arm.



Practice

- 3 Fill in the missing words to complete the sentences about how our muscles work.
- Muscles work by _____ on the _____ they are joined to.
- Muscles work in _____. When one muscle _____,
- the other muscle _____. The muscle that contracts gets _____.
- _____ The muscle that relaxes gets _____.

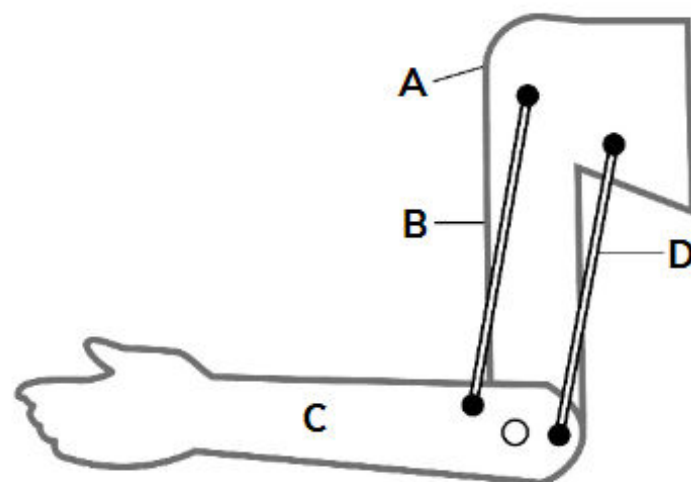
4 Underline the word that makes each of the sentences true.

The muscle that is working **contracts/relaxes**.

The muscle that is resting **contracts/relaxes**.

Challenge

5 Amira and Jessie made a model to show how muscles work. This is what their model looked like.



a Which part of the body does each part of the model represent?

A _____

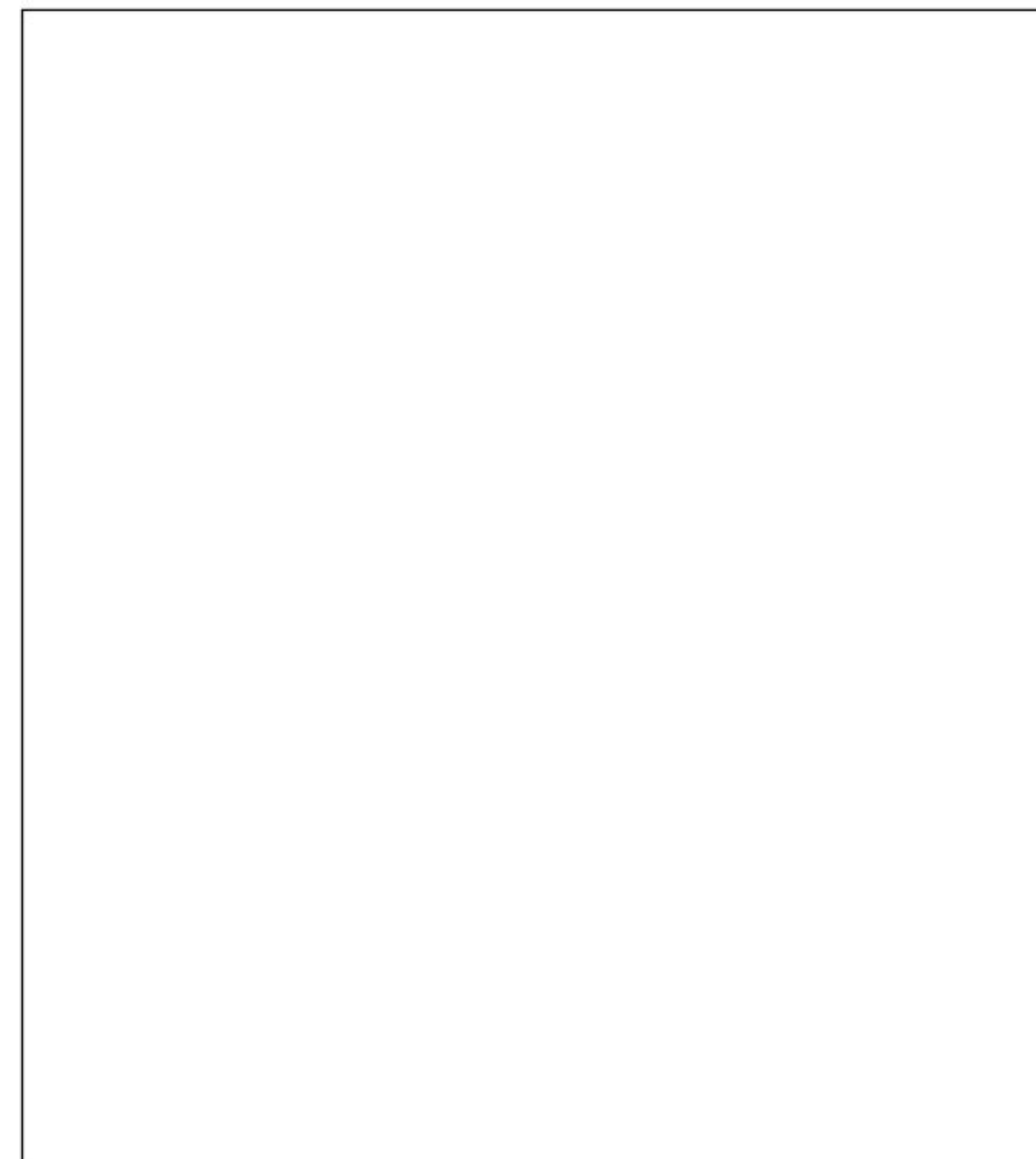
B _____

C _____

D _____

b What happens to part C when you pull on part B?

Make a drawing to show this.



c Underline the correct words in the following sentences to explain your drawing.

Part B **relaxes / contracts** and gets **shorter / longer**. Part B **pulls / pushes** on part C and makes it **drop / lift**.