Nova’s Guide to Skeletons and Muscles

Learning objective: To identify that humans and some other animals have skeletons and muscles for support, protection and movement.

Read the text carefully. Use the word bank to help you answer the questions. Write your answers in the boxes provided.

Nova the barn owl loves to explore. Nova knows that humans and many animals have a skeleton inside their bodies. This is called an endoskeleton. Your skeleton is made of many hard bones. These bones give your body shape and support. Without bones, we would be a wobbly heap on the floor! Your skeleton also helps to protect your soft organs. For example, your ribcage protects your heart and lungs.

But how do we move? We need muscles! Muscles are attached to our bones. When a muscle gets shorter, it pulls on the bone. This pull creates movement. You have joints where two bones meet, like your knees and elbows. Joints help your body bend and twist. Muscles work in pairs to help you run, jump, and wave.

Nova says that looking after your bones and muscles is very important. Eating healthy food and staying active keeps your skeleton strong. Whether you are flying like an owl or running like a child, your bones and muscles are working hard every single day. They are like a clever team working together to help you play and grow.

Word bank: Skeleton · Muscles · Support · Protect · Movement · Joints

1. What are two things that a skeleton does for the body? (2 marks)

2. Where do two bones meet in the body? (1 mark)

3. Why would it be difficult to move if you did not have any muscles? (2 marks)

4. Look at the sentence about the ribcage. Why does the body need the ribcage to be hard instead of soft? (2 marks)

5. Why is it important to stay active? Give one reason. (1 mark)

Draw: Draw a picture of a human arm. Label the 'bone' and the 'muscle'.

Extension challenge: Find out the name of the longest bone in the human body and write it down.