

Nova's Guide to Skeletons and Muscles

Learning objective: To describe the functions of the human skeleton and explain how muscles work in pairs to create movement.

Use this writing scaffold to help Nova the owl explain how our bodies move. Complete each section using your knowledge of anatomy.

Our bodies are incredible machines that rely on a complex system of bones and muscles to move, stand, and grow.

Word bank: support · protection · joints · antagonistic muscles · biceps · triceps · contract · relax · femur · cranium · tendons

1. The Skeleton: Why do we have a skeleton? Start your paragraph by explaining the three main functions of the skeleton (support, movement, and protection)... (3 marks)

2. The Joints: How do bones connect? Describe why we have joints and name two types of joints found in the human body... (2 marks)

3. Muscles and Movement: How do muscles work? Explain the concept of 'antagonistic pairs' by describing what happens to the bicep and tricep when you bend your arm... (3 marks)

4. Comparing Skeletons: How does a human skeleton differ from an invertebrate? Write a short comparison between vertebrates and creatures like jellyfish... (2 marks)

5. Conclusion: Why is it important to have both bones and muscles? Summarise what would happen to a human body if we were missing either system... (2 marks)

Extension challenge: Research a specific bone in the human body, such as the humerus or the pelvis. Write a 'fact file' entry describing its shape and its specific job within the skeletal system.