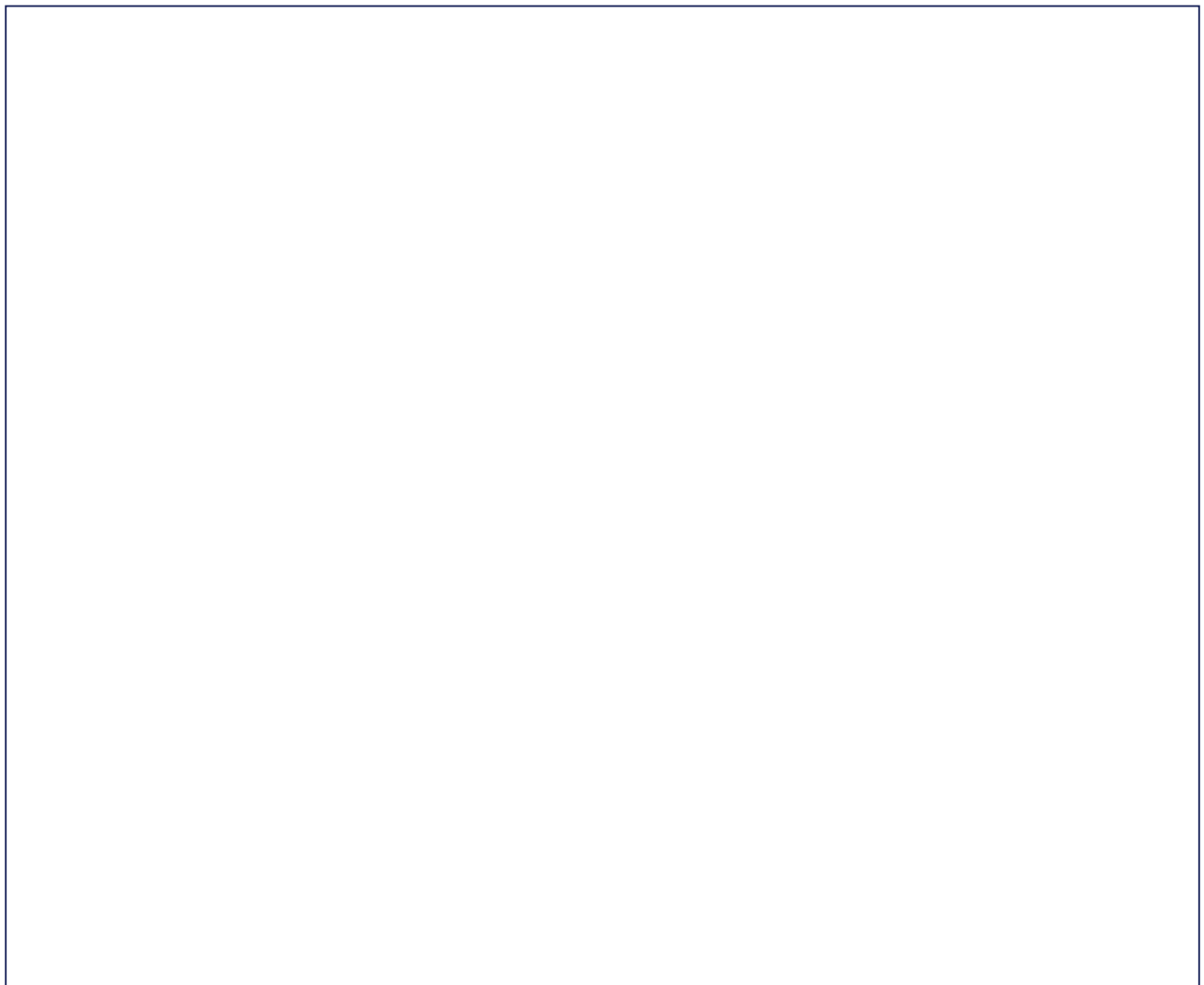


Nova's Anatomy Adventure: The Human Frame

Learning objective: To identify and label the primary bones of the human skeleton and understand how the musculoskeletal system supports movement.

Follow the drawing prompt to create a detailed scientific diagram of the human skeleton. Once your skeleton is drawn, use the labels from the word bank to correctly identify the major bones. Finally, answer the challenge questions below to demonstrate your understanding of how our bodies function.

Draw: Draw a large, clear scientific diagram of a human skeleton on the left side of your page. Use a pencil to sketch the bones with anatomical accuracy. Ensure the joints (such as the knees and elbows) are visible. Leave plenty of space around the skeleton to draw lines pointing to the specific bones listed in the word bank. Use a ruler for your label lines to keep your diagram tidy and professional.



Label words: Cranium · Mandible · Clavicle · Sternum · Rib cage · Humerus · Pelvis · Femur · Patella · Tibia

Steps:

1. Step 1: Sketch a human skeleton in a standing position. Use clear, thin lines to show the structure. Label the femur and the cranium.
2. Step 2: Draw an arrow pointing to the rib cage. Explain why this structure is vital for protecting internal organs.

3. Compare and contrast the function of the skull (cranium) with the function of the femur. Why do they need different physical properties?
4. Justify your answer: Why is it important for the human body to have a skeleton rather than being made only of soft tissue?
5. What might happen if the human body did not have joints connecting the bones?
6. Explain why muscles must work in pairs to allow us to move our arms and legs. What is this process called?