Bone Clues

Locate bones by division and identifying feature

HS-AP3-3 "Locate and identify individual bones of the axial and appendicular skeleton and unique features of bones."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the names of bones, circle their named features, and write A or P above each underlined name to show whether it belongs to the axial or appendicular skeleton.

The Unlabeled Bone Box

1. At a museum workbench, a box of bones has lost its labels. The first sorting clue is location: the axial skeleton forms the body's central axis, including skull bones, vertebrae, ribs, and the sternum. A parietal bone lies on the upper side of the skull. Its edge meets the opposite parietal bone at the sagittal suture. Vertebrae stack along the back; a typical vertebra has a vertebral foramen, an opening for the spinal cord. Ribs curve around the chest, while the sternum sits at the front of the chest. The sternum's xiphoid process forms its small lower tip.

2. The next tray holds bones of the appendicular skeleton, which includes the shoulder girdles, arms, and hands. The scapula, or shoulder blade, lies on the upper back. A raised spine crosses its rear surface, and a shallow glenoid cavity receives the head of the humerus. The humerus is the upper arm bone; its greater tubercle is a bump near the shoulder where muscles attach. Below the elbow, the ulna runs along the little-finger side of the forearm. Its olecranon makes the point you feel at the back of the elbow. The radius runs along the thumb side.

3. The appendicular skeleton also includes the hip bones, legs, and feet. Each hip bone has an acetabulum, a cup-shaped socket for the femur. The femur is the thigh bone; its greater trochanter projects near the hip and anchors muscles. At the knee, the patella sits in front of the joint and has a pointed lower tip called the apex. The tibia is the larger lower-leg bone and bears weight. Beside it, the slender fibula ends in the lateral malleolus, the bony bump on the outer ankle. These surface details help distinguish neighbors that lie close together.

2 ANSWER WITH EVIDENCE

Use the passage

1. Which axial bone has an opening for the spinal cord, and where is that bone located?

2. A bone on the upper back has a raised spine. Identify the bone and its skeletal division.

3. Which forearm bone has the olecranon, and where can you feel that feature?

4. Which lower-leg bone has the lateral malleolus, and where is that feature located?

3 YOUR TURN

Your own words

Write a three-sentence museum label for three different bones not named in your Part 2 answers. Include at least one axial and one appendicular bone; in each sentence, name the bone, locate it, identify a feature from the passage, and state its skeletal division.

Bone Clues

PART 1 · READ AND MARK

Underline the names of bones, circle their named features, and write A or P above each underlined name to show whether it belongs to the axial or appendicular skeleton. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Which axial bone has an opening for the spinal cord, and where is that bone located?	**A vertebra has a vertebral foramen for the spinal cord. Vertebrae stack along the back.**
2	A bone on the upper back has a raised spine. Identify the bone and its skeletal division.	**It is the scapula, an appendicular bone.**
3	Which forearm bone has the olecranon, and where can you feel that feature?	**The ulna has the olecranon, which forms the point at the back of the elbow.**
4	Which lower-leg bone has the lateral malleolus, and where is that feature located?	**The fibula has the lateral malleolus at the outer ankle.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

The sternum is an axial bone at the front of the chest, and its xiphoid process forms its lower tip. The humerus is an appendicular bone in the upper arm with a greater tubercle near the shoulder. The femur is an appendicular bone in the thigh with a greater trochanter near the hip.

Accept any three distinct bones other than vertebra, scapula, ulna, and fibula if each sentence gives a passage-supported location, feature, and correct division. The label must include both skeletal divisions.