Name_____ Date_____

Chapter 4 Lab Investigation: Know Your Bones

Purpose

In this activity you will identify bones on your skeleton. You will also identify which bones are part of the axial skeleton and which are part of the appendicular skeleton.

Materials

your textbook, your body

Procedure

For each bone you identify below, make sure you know whether the bone is part of the axial or appendicular skeleton.

1. Find and feel the phalanges of your hand.
   A. How many phalanges do you count on each finger (clue: feel for joints)? _____
   B. How many phalanges do you count on each thumb? _____
2. Feel all the way across the back of your hand to find your metacarpals. How many metacarpals do you count? _____
3. Feel your carpals.
   A. Can you count individual bones? _____
   B. What type of joint is found in the carpals? _____
4. Find your radius and ulna. Can you feel each?
   A. Which bone, the radius or the ulna, is on the thumb side of the forearm? _____
   B. Which bone is on the little finger side of the forearm? _____
5. Feel the distal end of your forearm, then supinate (turn palm up) and pronate (turn palm down) your forearm.
   A. Which bone moves? _____
   B. Which bone is stationary? _____
6. Follow your ulna to your elbow.
   A. What type of joint is the elbow? _____
   B. What is the name of the process at the proximal end of the ulna? _____
7. Feel for the medial epicondyle at the distal end of your humerus. Flex and extend your forearm. Does the medial epicondyle move? _____
8. Find your clavicle.
   A. Which bone is your clavicle medially articulated with? _____
   B. Which bone is your clavicle laterally articulated with? _____
9. Follow your clavicle to the shoulder joint, then follow it back to the sternum. Can you feel a notch where the two clavicles articulate with the sternum? _____
10. Feel your ribs.
    A. How many different rib bones can you count? _____
    B. Can you find your floating ribs? _____
    C. Can you locate your xiphoid process? _____

11. Feel your knee.
    A. What type of joint is the knee? _____
    B. Can you feel the patella? _____
    C. What bones articulate to form the knee? _____
12. Feel your lower leg.
    A. Can you feel the tibia? _____
    B. Can you feel the fibula? _____
13. Feel your foot.
    A. Can you locate your calcaneus? _____
    B. Can you feel your tarsals? Which ones? _____
    C. How many metatarsals can you feel? _____
    D. How many phalanges are in your big toe? _____
    E. How many phalanges are in each remaining toe? _____
14. Feel your cranium.
    A. Where is the occipital bone located? _____
    B. How many parietal bones can you feel? _____
    C. Where is the frontal bone located? _____
    D. Where are the temporal bones located? _____
15. Feel your face.
    A. Can you feel your zygomatic bones? _____
    B. What is another name for the eye sockets? _____
    C. How many nasal bones do you have? _____
    D. Can you feel your palatine bones with your tongue? _____
    E. Where are your maxillary bones located? _____
    F. Is your mandible movable? _____

Conclusions

Place each bone listed in the proper column below: phalanges, tibia, sacrum, humerus, rib bones, patella, radius, temporal bones, calcaneus, frontal bone, metacarpals, cranium, occipital bones, ulna, zygomatic bone, tarsals, xiphoid process, clavicle

Bones of the Appendicular Skeleton	**Bones of the Axial Skeleton**