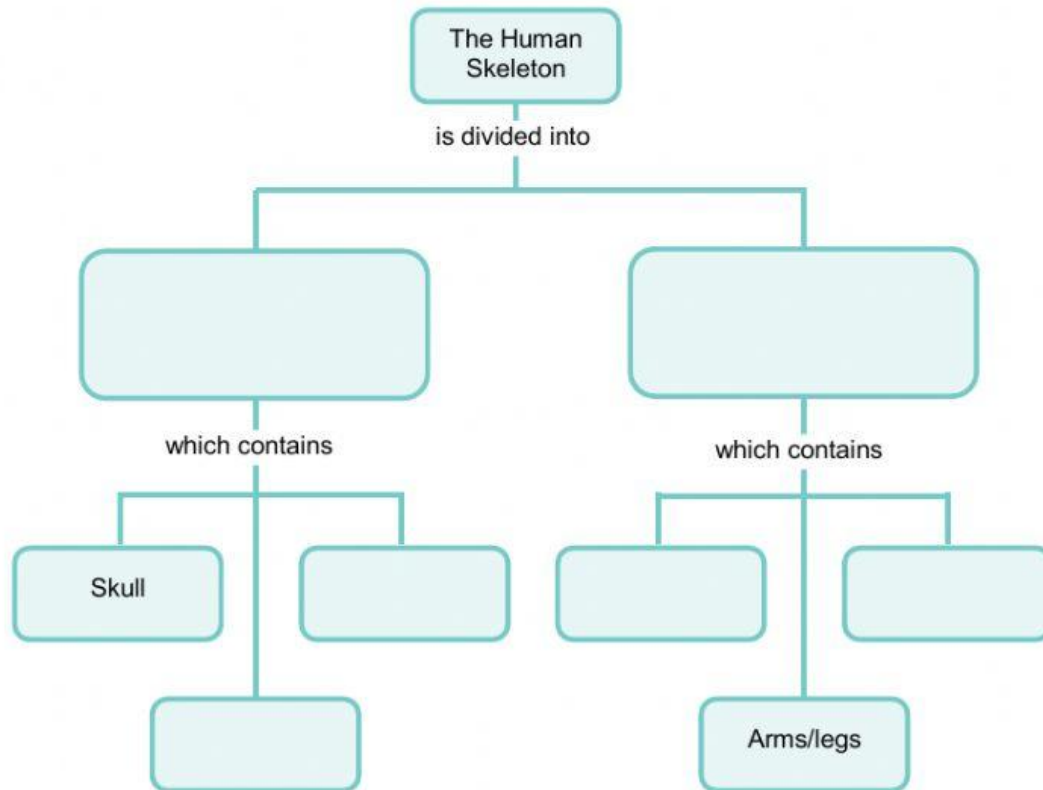


32.1 The Skeletal System

The Skeleton

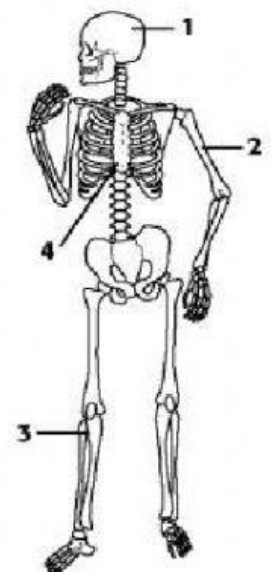
1. Complete the concept map that summarizes the parts of the human skeleton.

Appendicular Axial Shoulder Vertebral column Rib cage



2. Refer to the illustration shown. Answer with **AX** for axial **AP** for appendicular:

- Bones 2 and 3 are part of theskeleton.
- Bones 1 and 4 are part of the.....skeleton.
- The bones of the skull and backbone are part of theskeleton.
- The bones of the arms, legs, and pelvis make up the..... skeleton.



Bones

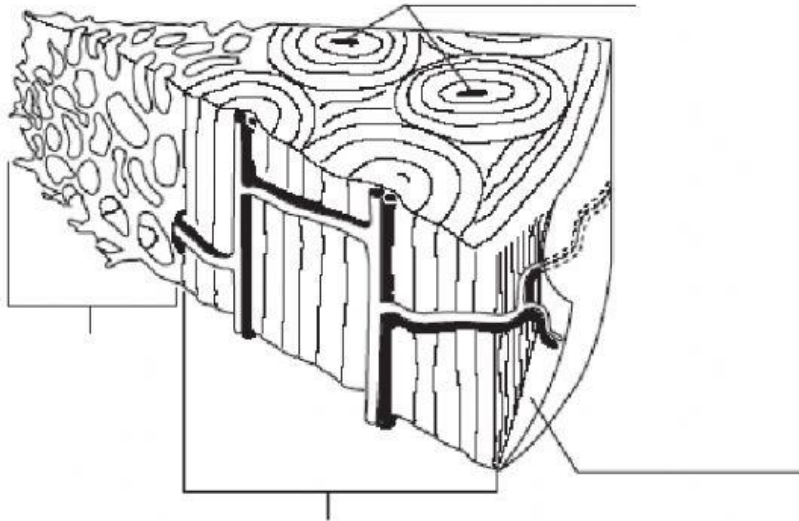
3. **THINK VISUALLY** The diagram shows a cross-section of bone. On the lines below,

Haversian canals

periosteum

compact bone

spongy bone



For Questions 6–12, complete each statement by writing the correct word or words

marrow

osteoblast

ossification

Haversian canal

periosteum

spongy

osteoclast

4. A tough layer of connective tissue called the _____ surrounds a bone.
5. Nerves and blood vessels run through the _____ in bones.
6. Bone _____ is soft tissue in bone cavities.
7. Bone with a latticework structure is called _____ bone.
8. During the process of _____, cartilage is replaced by bone.
9. Cells that secrete mineral deposits that form bone are called _____.
10. Osteoporosis results when _____ cells break down bone minerals more quickly than they can be deposited.

Joints

For Questions 15–19, match each joint with the category of joints that it represents

Joint	Category
_____ 11. Ankle	A. Ball-and-socket joint
_____ 12. between two vertebrae	B. Hinge joint
_____ 13. Shoulder	C. Immovable joint
_____ 14. Elbow	D. Pivot joint
_____ 15. between skull bones	E. Slightly movable joint

For Questions 20–22, write True or False on the line provided.

16. Ligaments protect the ends of bones as they move against each other at joints.
17. Synovial fluid prevents the ends of bones from slipping past each other at joints.
18. Osteoarthritis is joint pain and stiffness caused by loss of cartilage.