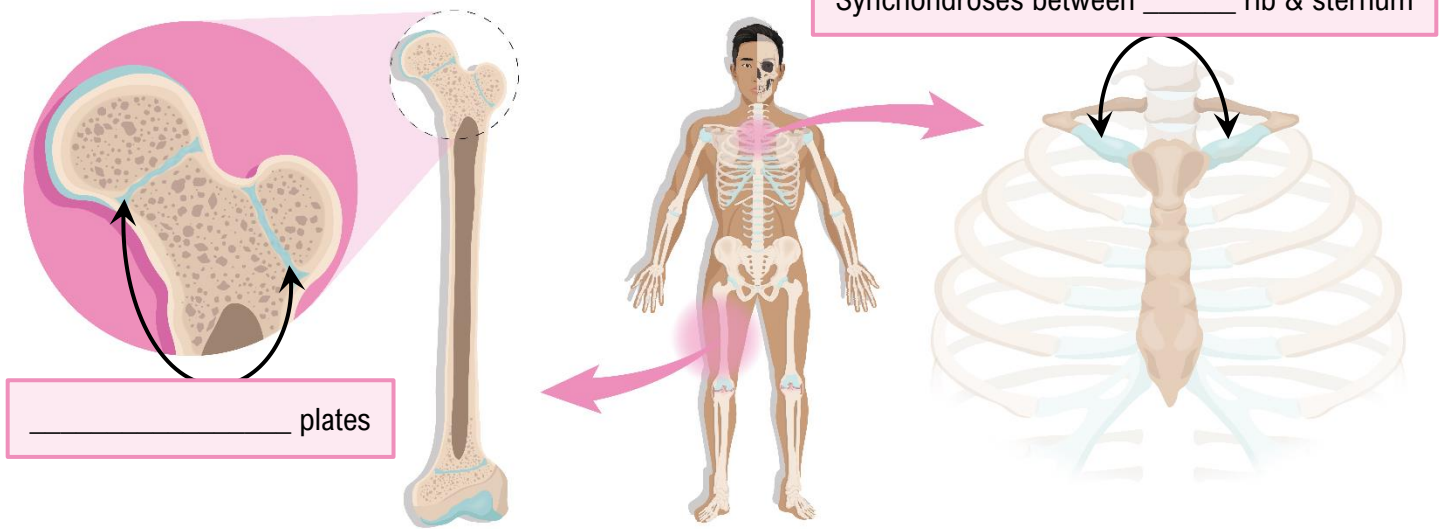


TOPIC: STRUCTURAL CLASS: CARTILAGINOUS JOINTS

- **Cartilaginous Joints:** bones bound by _____.
 - Like fibrous joints, they are structurally _____ BUT have _____ movement (always **S** or **A**).
- _____ types of cartilaginous joints: **1) Synchondroses** **2) Symphyses.**

1) Synchondrosis (Pleural: Synchondroses)

- **Synchondroses:** cartilaginous joints where bones are bound by _____ cartilage (*chondro* = cartilage).
 - Provides structural _____ BUT allows _____ movement (always **S**).
 - Like sutures, eventually some synchondroses bones may _____ to become a “**synostosis**” (bony joint).
 - Hyaline cartilage *can* _____ (be replaced by bone).



EXAMPLE: How are synchondroses similar to sutures?


- They are both made of rigid hyaline cartilage.
- Epiphyseal plates and sutures can both ossify over time to form synostoses.
- The costosternal synchondrosis and sutures allow a small amount of movement.
- They are both fibrous joints.

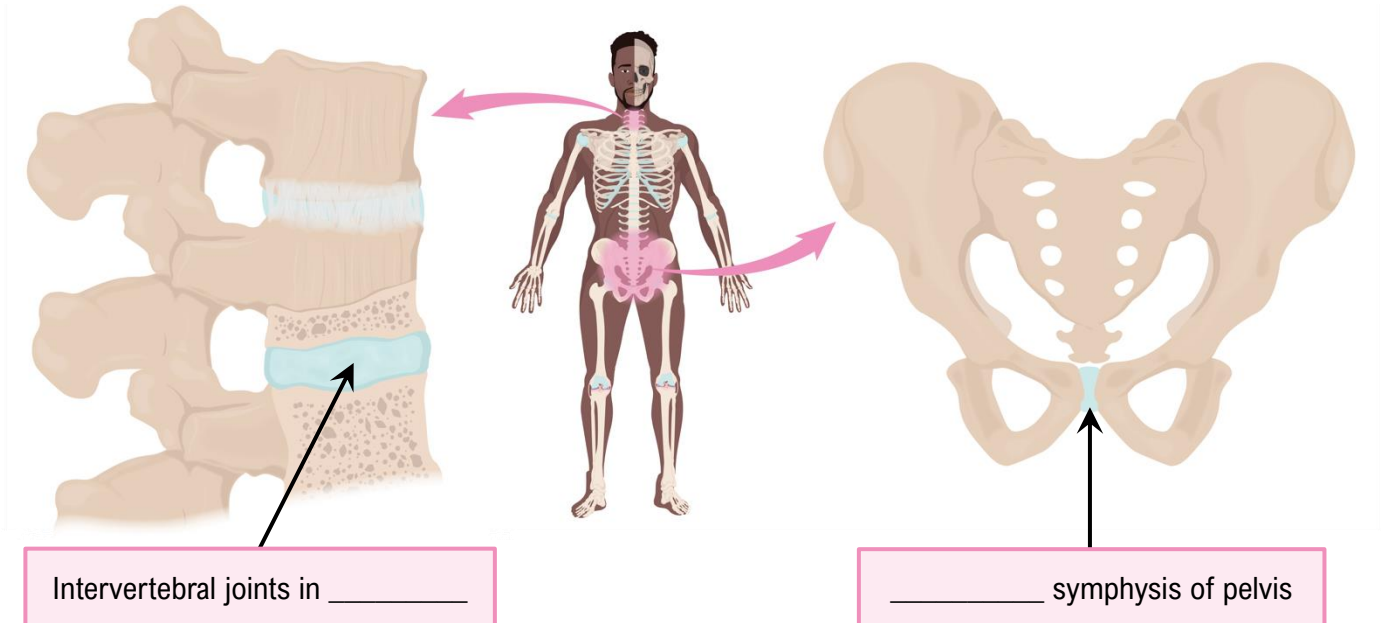
PRACTICE: Which of the following statements is true?

- Synchondroses can be either synarthroses or amphiarthroses.
- Synchondroses are more functionally similar to syndesmoses than gomphoses.
- Synchondroses can be found in both the axial and appendicular skeleton.
- All statements are true.

TOPIC: STRUCTURAL CLASS: CARTILAGINOUS JOINTS

2) Symphysis (Pleural: Symphyses)

- **Symphyses:** cartilaginous joints in body's _____idline where bones are bound by _____ibrocartilage.
 - Designed for *strength & flexibility* and allows _____ little movement (always .
 - Fibrocartilage is compressible, resilient & flexible, allowing symphyses to act as _____ absorbers.



EXAMPLE: Which type of joint would be best suited to withstanding a great deal of mechanical stress while also being compressible in order to absorb shock?

- | | |
|-------------------|---------------|
| a) Synchondroses. | c) Symphyses. |
| b) Syndesmoses. | d) Gomphoses. |

PRACTICE: Which joint type is primarily responsible for allowing growth in long bones during childhood?

- | | |
|------------------|---------------|
| a) Syndesmosis | c) Symphysis. |
| b) Synchondrosis | d) Gomphosis. |

PRACTICE: Which of the following describes a cartilaginous joint?

- a) The amphiarthrosis between the radius and ulna, allowing for forearm rotation.
- b) The freely movable shoulder joint, which contains articular and hyaline cartilage.
- c) The synarthrosis between bones of the skull.
- d) The amphiarthrosis between adjacent vertebrae in the spine.