



لجان الدفعات

PHYSIOLOGY

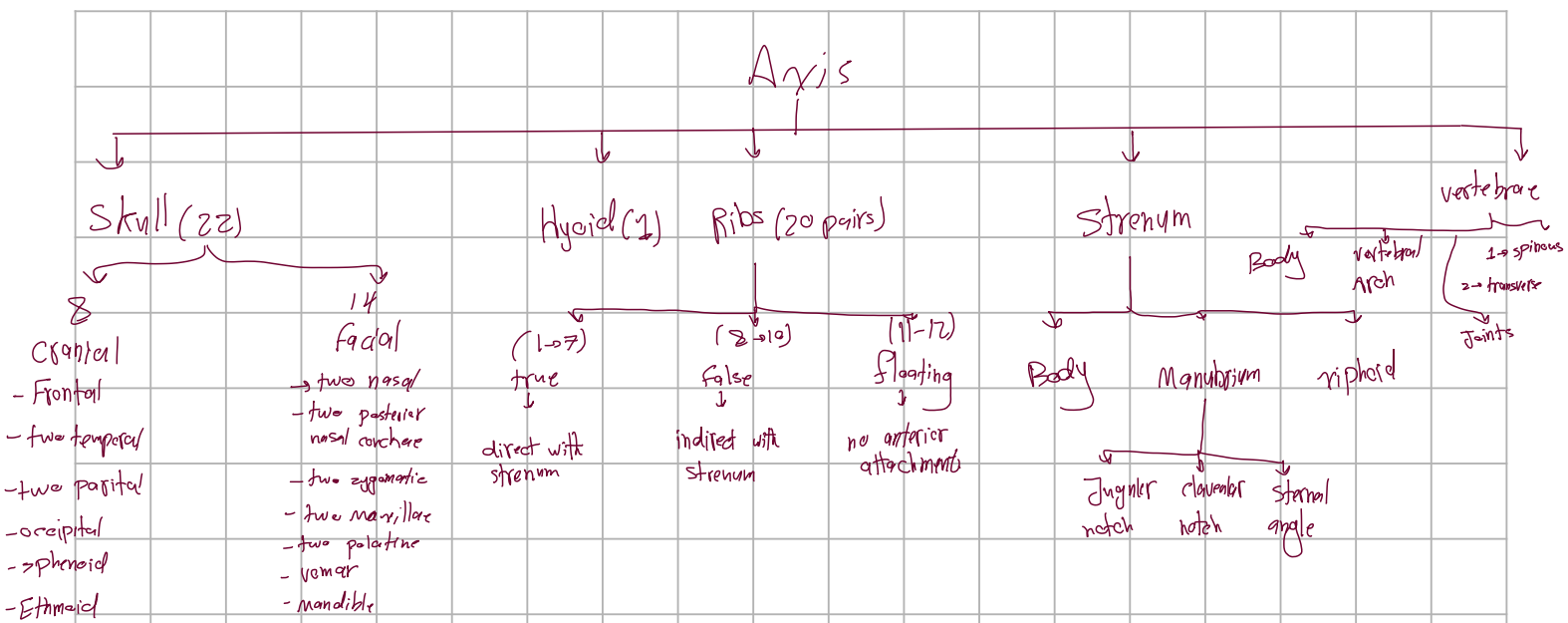
MORPHINE ACADEMY

السلام عليكم ورحمة الله وبركاته

يا أهل الخير، هاي مجموعة من المعلومات البشعة الي انتوا بتعرفوها ودارسينها، بس استثقلتها كمعلومات وحسيتها دقيقة، لذلك كتبتهم بهالسايدات ونسأل الله الثبات واعمل زيهم على الباقي

بالتوفيق ان شاء الله

+ نسويك + نسويك بالأسفل



* Concentric circles (rings) of Bone-matrix in compact bone are lamellar

* Osteocytes are located in lacunae, the lacunae attach with each other by canaliculi, all canaliculi in unit called osteon.

* Bone growth occurs at site of Epiphyseal plate [made of hyaline cartilage], which is the epiphyseal plate of a long bone located between the diaphysis and the epiphysis.

* The perceptible protrusion on the back of the head is the external occipital protuberance.

* Ethmoid bone has a transverse (cribriform) plate that forms the roof of the nasal cavity.

* The hard palate is formed by the maxillae and palatine

* Superior nuchal line is border between head and neck.

* The nasal septum is formed by vomer bone and the perpendicular plate of the Ethmoid.

* The nasal conchae with all its parts form the lateral wall.

* Lacrimal bone forms part of the medial wall of the orbit, where Ethmoid bone is located.

* The sphenoid bone contains the sella turcica, within which is the hypophyseal fossa.

* The facial paranasal sinus is one, the cranial paranasal sinuses are three, and the main (total) paranasal sinuses are four.

* Paranasal sinuses are found in Frontal, Ethmoid, Sphenoid and Maxillary bones.

* The Fontanelles, Eventually, are replaced with bone to become sutures.

* The first cervical vertebra (C1) called Atlas, the second cervical vertebra (C2) called Axis that has dens.

* The Intervertebral Discs formed of Fibrocartilage.

* The parts of Manubrium are: 1- sternal angle, 2- clavicular notch, 3- Jugular notch.






* Sternal angle attaches with rib no. 2, The body attaches with rib no. (3-10), the xiphoid is not attach with any rib.

* Each rib is attached with vertebral column, but not all attach with sternum.

* Manubrium attaches with rib no. 1

الحل
اجابة الاسئلة - هو ، سؤال واجابة :

- | | |
|----------------------------|--------------------------------|
| 1 → B) 206 | 16 → B) Medullary cavity. |
| 2 → c) Axial | 17 → c) 22 |
| 3 → c) Osteoblast | 18 → c) sphenoid |
| 4 → B) Movement | 19 → c) Mandible |
| 5 → B) Lacunae | 20 → c) sagittal suture. |
| 6 → D) Osteoclast | 21 → c) Foramen magnum |
| 7 → c) periosteum | 22 → B) Unossified tissue |
| 8 → c) collagen | 23 → B) Hyoid |
| 9 → B) tooth discoloration | 24 → c) 5 |
| 10 → c) compact. | 25 → B) Atlas |
| 11 → A) Osteons. | 26 → A) Intervertebral discs. |
| 12 → c) Diaphysis | 27 → c) xiphoid. |
| 13 → c) carpal | 28 → A) pairs (1-7) |
| 14 → B) Epiphyseal plate | 29 → B) no Anterior attachment |
| 15 → c) sesamoid bones. | 30 → D) sacrum. |

1. How many bones does the adult human skeleton typically consist of? 
 - A) 106
 - B) 206
 - C) 306
 - D) 212
2. Which division of the skeleton is primarily responsible for the protection of vital organs? 
 - A) Appendicular skeleton
 - B) Endoskeleton
 - C) Axial skeleton
 - D) Peripheral skeleton
3. Which bone cell is responsible for the synthesis and calcification of the bone matrix? 
 - A) Osteocyte
 - B) Osteoclast
 - C) Osteoblast
 - D) Chondrocyte
4. What is the primary function of the appendicular skeleton? 
 - A) Protection of the brain
 - B) Movement
 - C) Support of the longitudinal axis
 - D) Production of hormones
5. Where are osteocytes located? 
 - A) Periosteum
 - B) Lacunae
 - C) Medullary cavity
 - D) Haversian canal

6. Which cell type is a form of macrophage responsible for bone resorption (destruction)? 


- A) Osteoblast
- B) Osteoprogenitor
- C) Osteocyte
- D) Osteoclast

7. What is the name of the thick connective tissue layer that covers the outside of a bone? 

- A) Endosteum
- B) Epiphysis
- C) Periosteum
- D) Diaphysis

8. The bone matrix is primarily composed of which fiber type? 


- A) Elastin
- B) Reticular
- C) Collagen
- D) Keratin

9. Why should Tetracycline be avoided in pregnant women and young children? 

- A) It causes bone fractures.
- B) It leads to permanent tooth discoloration.
- C) It inhibits growth hormone.
- D) It prevents the formation of red blood cells.

1. Which type of bone appears as a dense area with generally no cavities? 


- A) Spongy bone
- B) Woven bone
- C) Compact bone
- D) Cancellous bone

2. In secondary (lamellar) bone, what are the concentric circles of matrix called? 


- A) Osteons
- B) Canaliculi
- C) Trabeculae
- D) Diaphyses

3. The shaft or middle tube-like part of a long bone is known as the: 



- A) Epiphysis
- B) Periosteum
- C) Diaphysis
- D) Metaphysis

4. Which of the following is classified as a "Short Bone"? 



- A) Femur
- B) Sternum
- C) Carpal bones
- D) Vertebrae


5. Where does the increase in the length of a bone occur? 

- A) Periosteum
- B) Epiphyseal plate
- C) Medullary cavity
- D) Endosteum

6. Which type of bone is found specifically within tendons to protect them from wear? 
- A) Irregular bones
 - B) Flat bones
 - C) Sesamoid bones
 - D) Sutural bones
7. The central cavity within the diaphysis of a long bone is called the: 
- A) Lacuna
 - B) Medullary cavity
 - C) Foramen magnum
 - D) Nutrient foramen

The Skull


1. How many bones make up the human skull? 
- A) 14
 - B) 8
 - C) 22
 - D) 26
2. Which bone is known as the "Keystone" because it attaches to all other cranial bones? 
- A) Frontal bone
 - B) Occipital bone
 - C) Sphenoid bone
 - D) Ethmoid bone

3. What is the only movable bone in the skull?  +1


- A) Maxilla
- B) Zygomatic bone
- C) Mandible
- D) Temporal bone

4. Which suture is located between the two parietal bones? 

- A) Coronal suture
- B) Lambdoid suture
- C) Sagittal suture
- D) Squamous suture

5. What is the name of the largest foramen in the skull, located in the occipital bone? 


- A) Foramen ovale
- B) Mental foramen
- C) Foramen magnum
- D) Optic canal

6. What are "fontanelles"? 


- A) Small bones in the ear
- B) Unossified tissue areas in a fetal skull
- C) Sinus cavities in the face
- D) Growth plates in the ribs

1. Which bone is unique because it does not articulate with any other bone? 


- A) Patella
- B) Hyoid bone
- C) Scapula
- D) Clavicle

2. How many lumbar vertebrae are there in the adult human spine? 


- A) 7
- B) 12
- C) 5
- D) 4

3. The first cervical vertebra (C1) is also known as the: 


- A) Axis
- B) Atlas
- C) Dens
- D) Prominence

4. Which structure is found between adjacent vertebrae to absorb shock? 


- A) Intervertebral discs
- B) Suture joints
- C) Epiphyseal plates
- D) Synovial fluid

5. The sternum consists of three parts: the manubrium, the body, and the: 


- A) Costal cartilage
- B) Sternal angle
- C) Xiphoid process
- D) Dens

6. Which ribs are considered "true ribs" because they attach directly to the sternum? 

- A) Pairs 1–7
- B) Pairs 8–10
- C) Pairs 11–12
- D) All 12 pairs

7. Why are rib pairs 11 and 12 called "floating ribs"? 

- A) They are made entirely of cartilage.
- B) They have no anterior attachment.
- C) They are not attached to the vertebrae.
- D) They are only present in children.

8. Which region of the vertebral column has vertebrae that fuse to form a triangular bone in adults? 

- A) Cervical
- B) Thoracic
- C) Lumbar
- D) Sacrum