The Skeletal System: Notes

HS20-HB1

Analyze the anatomy and physiology of a healthy human.

Indicators for this outcome

(b) Describe the anatomy (structure) and physiology (function) of at least five human body systems (i.e., cardiovascular, endocrine, lymphatic, digestive, urinary, muscular, nervous, respiratory, reproductive, integumentary and skeletal). (K)

- The infant body contains over _____ bones.
- The human adult body contains _____bones
- After birth, bones start to _____in the infant body to become larger and stronger bones.

Bone Functions:

1. Support:

2. Protection:

3. Movement:

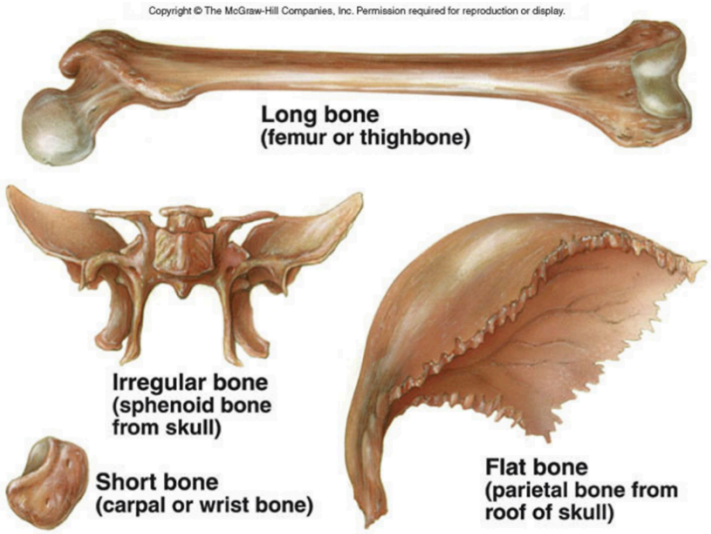
4. Blood Cell Production:

5. Storage:

The Skeletal System: Notes

Types of Bones:

1. Long Bones
2. Short Bones
3. Flat Bones
4. Irregular bones
5. Sesamoid bones



The skeletal system is composed of two types of skeletons:

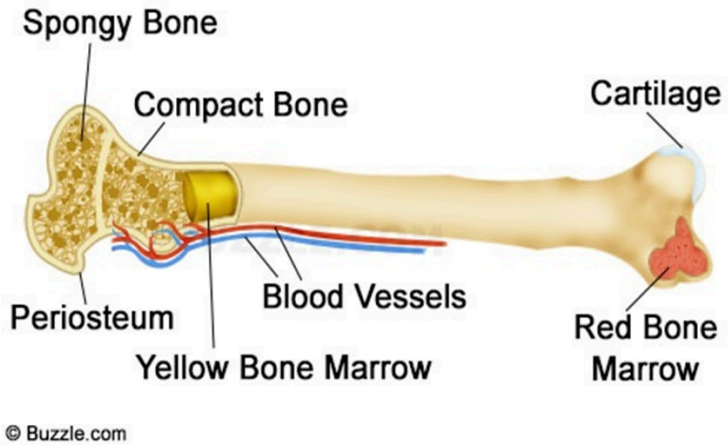
- Axial Skeleton:

- Appendicular Skeleton:

The Skeletal System: Notes

Bone Structure:

- Compact Bone
- Spongy Bone
- Cartilage



Bone Marrow:

- Red
  -
  - Everywhere in infant
- Yellow
  - Young to middle age development in shafts
  - Does _____ produce blood

As infants, our bodies are mostly _____. Over time this _____ cartilage is turned to _____ bone.

The Skeletal System: Notes

Cartilage is hardened when a mixture of _____and

_____ combine. This process is called _____

Bones continue to grow through childhood, growing _____,

_____ & _____. Growth occurs from the

_____

During puberty, _____ allow bones to become more _____ .

Bones are the _____, but after that

_____ to other areas of the body.

Bone _____ is directly related to _____ and

_____, especially in your childhood and teenage years.

Processes of Bone Growth:

- Ossification
- Osteoblasts
- Collagen
- Calcium phosphate
- Osteoclasts

Bone Joints:

- Joint:

- Joints allow various amounts of movement
- Some joints are held together for _____, some have a wide range of motion
- Try moving these joints: knee joint, vertebrae joints (bending side to side)

1. Gliding Joints

2. Pivot Joints

   Where _____ on each other. An example is the two top vertebrae that support the head. These joints pivot allowing you to turn your head

3. Ball and Socket Joints

   A _____ of a bone fits into a

   _____of another bone. An example is the

   _____ bone fitting into the socket of the _____ bone. Can you think of another?

4. Saddle Joints

   Allows movement…

   Example:

5. Hinge Joint

   Allows movement of bone in _____. Think of a swinging door. The _____ joint is a hinge joint.

Skeletal Disorders:

1.

2.
3.
4.
5.
6.
7.

Types of Fractures: