Histology archive week 4

Of the cells associated with bone , the one primarily responsible for the initial secretion and calcification of bone matrix is ?

- a. Osteoprogenitor cell
- b. Osteoblast
- c. Osteoclast
- d. Osteocyte
- e. Osteogenic cell
- Ans: b

Which of the following is incorrect about the osteoclast ?

- a. Generally large cells with variable shape
- b. Their ruffled border opposing the Howships lacunae
- c. They secrete acid phosphatase
- d. They contain many nuclei
- e. The secrete prebone

Ans: e

intramembranous ossification ..?

- a. Responsible for long bone formation
- b. Begins with cartilaginous precursor
- c. Begins with C.T membrane
- d. Begins during the third month of gestation
- e. Is the most common way the bone are formed

Ans: c

One of the following is correctly matched ?

- a. Woven bone // osteoid
- b. Prebone //secondary bone
- c. Bundle bone// lamellar bone
- d. Bundle bone // prebone
- e. Cancelleous bone // medullary bone

Ans: e

The process of bone growth in the epiphyseal plate is similar to ?

- a. Intramembranous ossification
- b. The process of ossification
- c. The process of osteopenia
- d. Endochondoral ossification
- e. The process of healing fractures

Ans: d



The cells that maintain mature compact bone are ?

- a. Osteoclasts d. Osteoblast
- b. Osteogenic cells
- d. Osteocyte
- c. Chondrocytes

Ans: d

Which of the following represents the correct order of zones before epiphyseal closure ?

a. Resting – hypertrophy – proliferation – calcification – degeneration
b. Proliferation – hypertrophy – calcification – degeneration – ossification
c. Resting - proliferation – hypertrophy – calcification – ossification
d. Hypertrophy – proliferation – ossification – calcification – resting

e. Resting – calcification – proliferation – ossification hypertrophy

Ans: c

Spongy bone contains all of the following except ?

- a. Trabeculae
- b. True osteons
- c. Hydroxyapatite
- d. Collagen fibers
- e. Calcium phosphate

Ans: b