\_\_\_\_\_\_\_\_\_\_\_\_ is the type of tissue is at the end of the bones.

1. Areolar connective tissue
2. Elastic cartilage
3. Hyaline cartilage
4. Reticular connective tissue
5. Fibrocartilage

ANSWER: C

Costal cartilage \_\_\_\_\_\_\_\_\_\_\_\_.

1. is found on the ends of long bones
2. is found in the pubic symphysis
3. connects the ribs to the sternum
4. makes up the epiphyseal plate
5. connects muscle to bone

ANSWER: C

The structural protein found in cartilage and bone is called \_\_\_\_\_\_\_\_\_\_\_\_\_.

1. collagen
2. glycogen
3. keratin
4. calcitonin

ANSWER: A

The cells that actively remove matrix from bone are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. chondroblasts
2. osteoblasts
3. osteoclasts
4. adipocytes
5. basal cells

ANSWER: C

Tendons attach to the \_\_\_\_\_\_\_\_\_\_\_\_ of a bone.

1. Diploe
2. Trabeculae
3. Spongy bone
4. Periosteum
5. Hyaline cartilage

ANSWER: D

The second stage of bone repair is \_\_\_\_\_\_\_\_\_\_\_\_\_.

1. fibrocartilage callus formation
2. bone remodeling
3. hematoma formation
4. bony callus formation

ANSWER: A

In blood calcium homeostasis, parathyroid hormone will cause a(n) \_\_\_\_\_\_\_\_\_\_ in blood calcium due to the action of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. increase / osteoclasts
2. increase / osteoblasts
3. decrease / osteoclasts
4. decrease / osteoblasts

ANSWER: A

Within the matrix of connective tissue, the \_\_\_\_\_\_\_\_\_ function to attract and trap water.

1. elastic fibers
2. proteoglycans
3. collagen fibers
4. reticular fibers

E. osteocytes

ANSWER: B

Elastic cartilage is found in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. tracheal rings
2. the outer ear
3. dermis
4. A & B
5. All of the above

ANSWER: B

In bone tissue, the mature osteocytes sit in spaces within the matrix called \_\_\_\_\_\_\_\_.

1. lacunae
2. lamellae
3. canaliculi
4. osteons
5. central canals

ANSWER: A

The process by which the humerus becomes a bone is called \_\_\_\_\_\_\_\_\_\_\_\_ and it is the \_\_\_\_\_\_\_\_ common form of bone development.

1. endochondral ossification / less
2. endochondral ossification / more
3. intramembranous ossification / less
4. intramembranous ossification / more

ANSWER: B

During postnatal bone growth in longs bones, \_\_\_\_\_\_\_\_\_\_ located in the epiphyseal plate undergo mitosis.

1. Chondroblasts
2. Osteoblasts
3. Osteoclasts
4. Adipocytes
5. Basal cells

ANSWER: A

Within the matrix of the connective tissue, \_\_\_\_\_\_\_\_ provides the strength or resistance to mechanical stress.

1. elastic fibers
2. proteoglycans
3. collagen fibers
4. reticular fibers

E. osteocytes

ANSWER: C

Which of the following would be an example of a short bone?

 A. vertebrae

 B. temporal bone

 C. carpal bone of the wrist

 D. humerus

 E. sternum

ANSWER: C

As a fetus, most of our bones start out as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. flat bones
2. sponge bone
3. fibrous connective tissue
4. hyaline cartilage
5. elastic cartilage

ANSWER: D

Vertebrae are considered to be \_\_\_\_\_\_\_\_\_\_\_\_ bones.

1. short
2. flat
3. long
4. irregular

ANSWER: D

The bones in the skull have a special type of spongy bone called \_\_\_\_\_\_\_\_\_\_.

1. diploe
2. collagen
3. compact bone
4. hematopoetic tissue

ANSWER: A

As long bones grow what is happening in the epiphyseal plate? Describe the four different layers of cells and what is happening in each layer.  What is bone remodeling and why is it important?

What is the difference between the epiphyseal plate and the epiphyseal line?