Skeletal System:
What are the general functions of the skeleton (ex. support, protection, mineral storage, etc.)
Know the microscopic structure of compact bone. What is an osteon and its components?
Which bones are classified within the axial skeleton? Within the appendicular skeleton?
What are the differences between spongy and compact bone?
Know and be able to identify the different types of bones (ex. long, short, flat, irregular).
Know and be able to identify the structure of a long bone (ex. compact & spongy bone, periostium, epiphiseal disks, epiphysis, diaphysis).
What is red marrow and what does it do? Where is it located during youth and adulthood?
What is yellow marrow, what does it do and where is it located during adulthood?
Know the different types of fractures.
Know the different types of bone cells and what they do (ex. osteoblast, osteoclast)
What are the two types of bone formation (endochondral and intramembranous) and which bones tend to develop from each?
What are the different types of skeletal cartilages and where are they found in the body?
What hormones affect osteoclast and osteoblast activity and how do they affect blood calcium?
What is Wolff’s law?
Know and understand the different bones of the skeleton and how they articulate.
Which skull bones have sinuses inside them? What are the functions of the paranasal sinuses?
What are the different types of vertebra and how is their function affected by their position? And how is their structure affected by their function?
What are the different portions of the coxal bone? Of the sternum?
Know the atlas and the axis, their structures and why they are special.
What is special about the hyoid bone? What is its function?
Know the structure and function of the intervertebral disks.
What are the normal curvatures of the vertebral column? The abnormal curvatures?
Which bones make up the pectoral girdle? The pelvic girdle?
Which bones make up the wrist? The hand? The ankle? The feet?

Joints:
What are the different structural classifications of joints (cartilaginous, fibrous, synovial) and examples of each.
What are the different functional classifications of joints (synarthrose, amphiarthrose, etc.) and examples of each? What types of movements are allowed by each type?
Be able to identify the basic parts of a synovial joint.

Muscular System:
Be able to identify the parts of a muscle (epimysium, fascicle, perimysium, muscle cell, etc.)
Be able to identify the parts of a sarcomere (A band, I band, thick & thin filaments, H zone, etc.)
Know muscle cell structure and function (parts of a muscle cell and what they do).
Know and understand the process of muscle contraction at the cellular level.
What is rigor mortis and why does it occur?
What is myoglobin and what does it do?