KEY CONCEPT

The skeletal system includes bones and tissues that are important for supporting, protecting, and moving your body.
33.1 Skeletal System

Your skeletal system is made up of the appendicular and axial skeletons.

- The skeletal system protects, supports, and moves the body.
• The appendicular skeleton includes legs, arms, feet and hands.
  – allows for movement
  – includes bones called girdles that connect limbs to body
33.1 Skeletal System

- The axial skeleton includes the skull, rib cage, and spinal column.
  - supports body and protects tissues
  - allows for limited movement
33.1 Skeletal System

- Cartilage is connective tissue between bones.
  - cushions bones
  - allows for smooth movement
  - connect two bones
Bones connect to form joints.

- Joints are places where two bones meet.
- There are three types of joints.
  - Fibrous, which does not allow for movement
33.1 Skeletal System

- **Bones connect to form joints.**
  - Joints are places where two bones meet.
  - There are three types of joints.
    - cartilaginous, which allows partial movement
33.1 Skeletal System

Bones connect to form joints.

- Joints are places were two bones meet.
- There are three types of joints.
  - synovial, which allows for greater movement.
• Ligaments are long bands of tissue that connect bones across a joint.
There are several types of synovial joints.

- gliding
- pivot
- ball-and-socket
- saddle
- hinge
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- Bones are living tissue.
  - Bone is made of compact bone tissue and spongy bone tissue.
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- Compact bone is hard and dense.
  - Osteocytes (bone cells) maintain compact bone rings.
  - Haversian canals allow blood vessels in the bone.
33.1 Skeletal System

- Spongy bone protects red or yellow bone marrow.
  - Red bone marrow produces blood cells.
  - Yellow bone marrow is mostly fat.
33.1 Skeletal System

- Calcification is the process of building hard bone.
  - combines collagen and calcium phosphate
  - transforms cartilage into hard bone during childhood