

## Third Grade Skeletal System Study Guide

How many bones are in the human body? 206

Our bones have many jobs. They - help hold you up - your body it's shape - protect your organs - help you move

There are 4 major types of bone shapes.

-Long (leg bones, arm bones, fingers, toes)

-Short (wrist and ankle bones, patella)

-Flat (ribs, skull, pelvis)

-Irregular (vertebrae (spine), bones of the face)

Joints are where two bones come together. Some types of joints are:

-Ball and socket – Shoulders and hips. Can move in many directions

- -Hinge Elbows, knees, fingers and toes. Allows the bones to move back and forth.
- -Pivot Neck. Allows the head to turn side to side without turning the whole body.

-Fixed - Skull. Locked together, do not allow movement

**Cartilage** is a tough, flexible tissue at the end of the bones that keeps the bones from grinding together.

Ligaments connect bones to bones. Tendons connect muscle to bones.

Bones are made of: -Solid bone (hard outer covering)

-Spongy bone (many holes that make the bones lightweight)

-Red marrow (makes red blood cells)

-Yellow marrow (stores fat)

-Cartilage (keeps bones from grinding together)

A broken bone is called a **fracture**.

X-rays are used to see broken bones.
A cast or splint helps a broken bone heal.
When a bone gets out of place, it is called a dislocation.
A sprain is an injury in a ligament (usually near a joint).
A strain is an injury in the soft tissue in the muscles or tendons.

How to keep your bones strong and healthy:

Exercise

Foods that contain **calcium** help make bones strong. Remember **"Posture Perfect**" when sitting, standing and moving. Use proper **sports equipment** to protect your bones.

How to treat an injury to your bones, tendons or ligaments: Remember R I C E

-R means rest, do not move the injured area

-I means ice, ice will help reduce swelling

-C means compression, press the ice over the area.

-E means elevate. Raise the injured part above the heart

Some diseases of the skeletal system are:

-Osteoporosis – bone tissue become brittle

-Arthritis –Swelling in the joints

-Scoliosis – curving of the spine

-Lyme disease – caused by the bite of a deer tick. Can affect the joints.