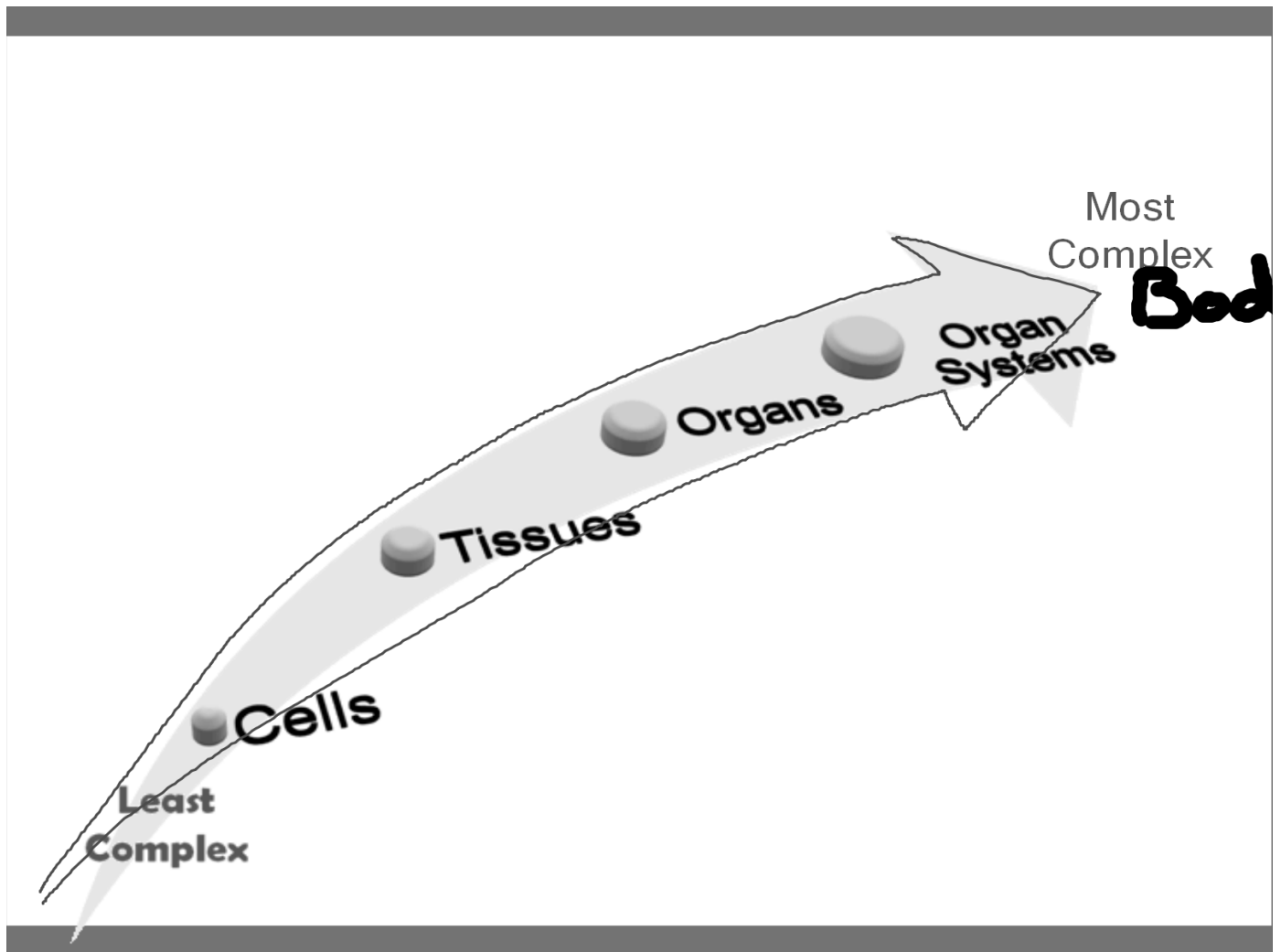


Human Body

**How are organisms structured
to ensure efficiency and
survival?**



Levels of Organization

- Cells

- the basic units and structures of living things.

- Tissues

- a group of similar cells that work together.

- Organs

- two or more tissues that work together to
– perform a specific function.

- Organ Systems

- organs that work together to perform specific functions
–help maintain homeostasis within the organism.

-Body

What We Know

Oxygen makes the blood turn red
Tissues make organs
Cells make life
Bones are hard

Questions

Why does blood turn red?
How does your spine bend?
What is Acid reflux?
What is Asthma?
What makes hair grow?
What makes hair not grow? } Stress
What makes your hair change color? }
Eye Color?
What is cartilage?
Lazy Eye?
Different types of teeth

What We Know

Oxygen makes the blood turn red
Tissues make organs
Cells make life
Bones are hard

Questions

Why do people have different heights (Bones)

How do teeth grow

Why is some cartilage and some bone?

Is cracking our knuckles bad?

What is a shin splint?

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**What is the difference between
a tissue and organ?**

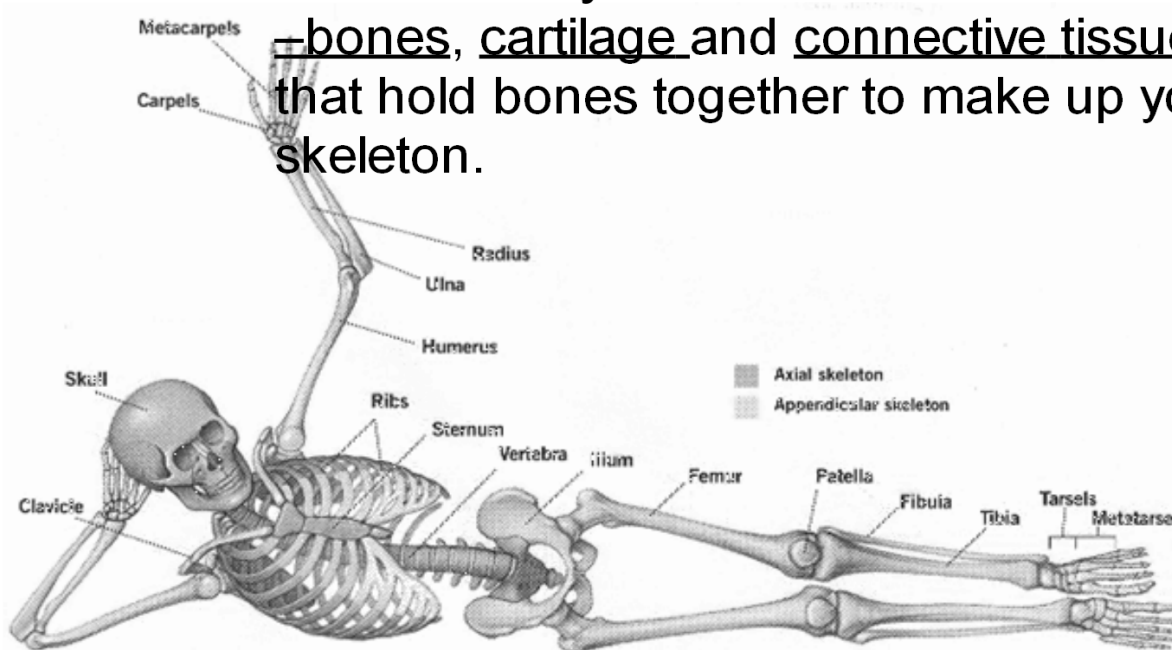
Tissues are made of similar cells

Organs are 2 or more tissues

Describe the Basic Functions of the Skeletal System

•Skeletal System

bones, cartilage and connective tissue that hold bones together to make up your skeleton.

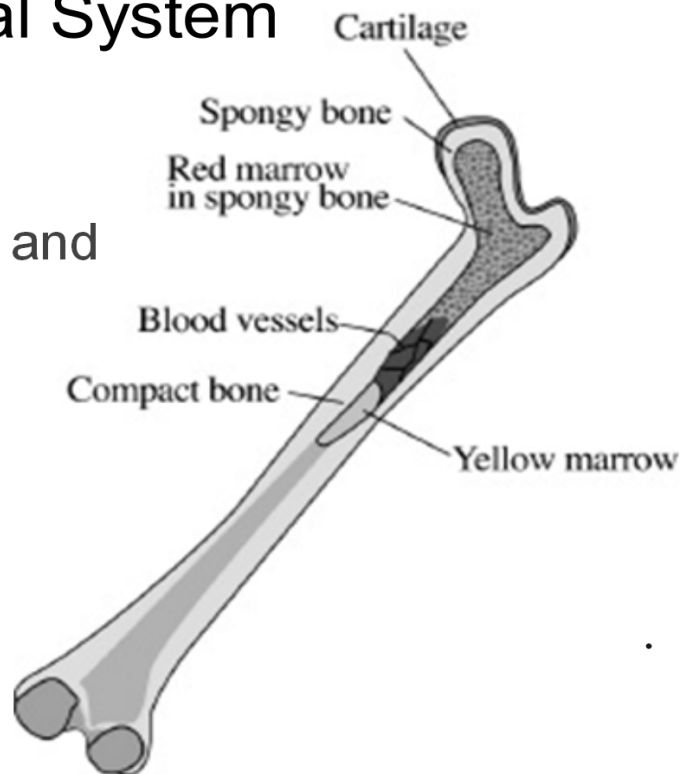


Describe the Basic Functions of the Skeletal System

- Bone

—an organ made up of connective tissue, minerals and osteoblasts

Osteoblasts are cells that deposit minerals



Describe the Basic Functions of the Skeletal System

•3 Parts of Bone

–Compact bone

- Compact dense and hard part of the bone, typically the outer layer

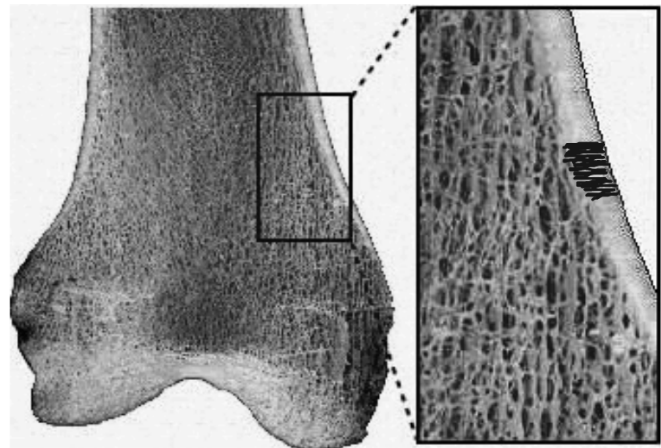
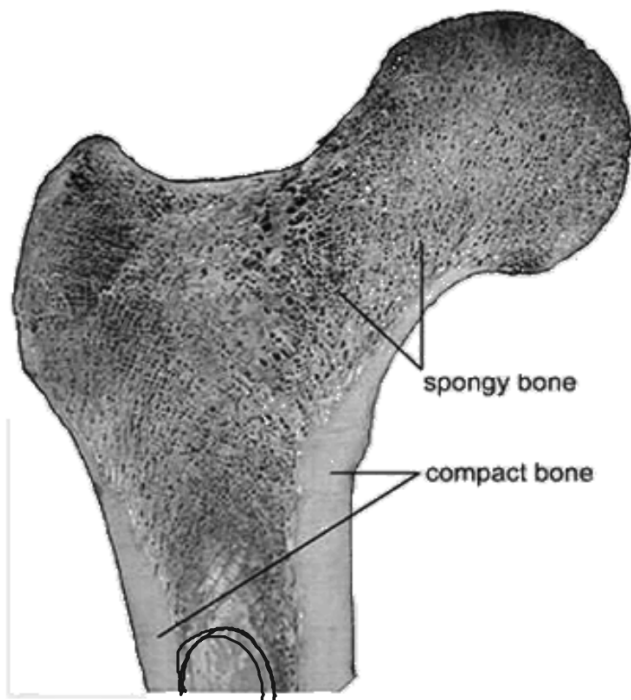
–Spongy bone

- Contains open spaces (like a sponge) and provides strength and support for the bone (like your IT bridges)

–Marrow

- Red marrow produces blood cells
- Yellow marrow stores fat.

Describe the Basic Functions of the Skeletal System



Describe the Basic Functions of the Skeletal System

- Much of the bone in your skeleton begins as cartilage.
- Cartilage
– a type of connective tissue that is dense and flexible.
- Osteoblasts deposit minerals in the cartilage changing it to bone.

Describe the Basic Functions of the Skeletal System



Describe the Basic Functions of the Skeletal System

•Joint

–A place where 2 or more bones meet.

Fixed Joint – no movement such as in the skull

Movable Joint – there is some sort of movement

•Ligament

–Strong bands of connective tissue that hold bone to bone at a movable joint

•Cartilage

–Covers the ends of bones at a joint to act as a cushion

Describe the Basic Functions of the Skeletal System

• Four Functions of the Skeletal System

• Protection

–Protects heart, lungs, brain, and spinal cord

Ribs *skull* *vertebrae*



• Storage

–Stores minerals for use by the muscles and nerves

–Stores fat for energy



Describe the Basic Functions of the Skeletal System

Four Functions of the Skeletal System

•Movement

–Muscles pull on bones to produce movement at a joint



•Blood cell formation

–Some bones have red marrow which makes blood cells



Describe the Basic Functions of the Skeletal System

- Diseases of the skeleton

- Osteoporosis – causes bone to become less dense

- Ostio refers to bone

- porous refers to having holes

-

- Arthritis – causes joints to stiffen and swell

- Arthro refers to joint

- itis is an inflammation