What are the 4 main steps of regeneration?

Cells begin at the basal layer, attached to connective tissue

Explain the process of keratinization

• The follicle fills up with keratin and then dries out

What are the 3 types of loose CT proper?

Areolar, adipose, reticular

What are the 3 types of dense CT proper?

• Regular, irregular, elastic

Where can you find dense regular CT?

Tendons, ligaments, fascia

What is the function of dense irregular CT?

Withstand tension

What is the function of elastic CT?

Recoil

What is the function of areolar CT?

• Support, inflammation

What is the function of adipose CT?

Cushion, insulation, energy storage

What is the function of reticular CT?

Support network

Name 4 types of CT cells & their functions

• Fibroblast: build ct

Chondroblast: build cartilage

Osteoblast: build bone

Hematopoietic stem cell: precursor to blood

• Fat cells: insulation, storage

• White blood cells: immune system

• Mast cells: inflammation

Macrophages: clean up

Name somewhere you can find collagen fibers

• tendons and ligaments

Name somewhere you can find elastic fibers

• vocal cords, lungs, skin, blood vessels

Name somewhere you can find reticular fibers

• endocrine glands, liver, nerves, muscle fibers, capillaries

Name the function of collagen fibers

• resist tension & pulling

Name the function of elastic fibers

stretch & contract

Name the function of reticular fibers

support complex organs

What does "osteo" mean?

bone

What does "neuro" mean?

nervous

What does "myo" mean?

muscle

What does "endo" mean?

inside

What does "exo" mean?

outside

What does "caudal" mean?

towards the tail

What does "cranial" mean?

towards the head

What does "dorsal" mean?

• towards the spine

What does "ventral" mean?

towards the belly

What does "proximal" mean?

closer to trunk

What does "distal" mean?

farther from trunk

What does "rostral" mean?

• towards the muzzle/nose

Describe the shape of cuboidal cells

• short, cube

Describe the shape of columnar cells

• tall, rectangular

Describe the shape of squamous cells

• thin, flat

Describe the shape of pseudostratified cells

• appear stratified, simple layer

Describe the function of transitional cells

• stretch & contract

Describe simple vs. stratified

• simple is one layer, stratified is multiple

List structural organization in order

• chemical, cell, tissue, organ, organ system, organism

Name the 8 necessary life functions

• locomotion, reproduction, growth, homeostasis, responsiveness, digestion, metabolism, excretion

Which necessary life function is the first to go?

repro

Which necessary life function is the second to go?

growth

Describe the purpose of homeostasis

maintain balance

What is a homologous structure?

• structure between species that is derived from a common ancestor

List the 5 survival needs

- water
- Atmospheric pressure
- nutrition
- Body temp
- Oxygen

Define diffusion

• moving from high concentration to low concentration

Give an example of a positive feedback loop

birth

Give an example of a negative feedback loop

sweating