

WHAT TO KNOW ABOUT FISH

Review:

Vocab list

Body Systems sheet

Chapter ??s

Fish Lab

Animal Kingdom Diagram

Diagrams/Drawings

CHORDATES/VERTEBRATES:

What 4 characteristics are shared by all CHORDATES?

(Notochord, pharyngeal pouches, dorsal nerve cord, post anal tail)

Which additional characteristics are shared by all VERTEBRATES?

(Skeleton of bone/cartilage, cranium, closed circulation, ventral heart, etc)

How is the body plan of vertebrates different from that of invertebrates

(Dorsal nerve cord/ventral heart is opposite of invertebrates)

FISH:

What are the 2 kinds of FISH? (Cartilagenous and Bony)

What are the 2 kinds of BONY FISH? (Lobe-finned and Ray-finned)

Why do scientists think LOBE-FINNED fish are important?

BONY FISH:

What are the 3 characteristics of BONY FISH ?

(Bone skeleton, scales, swim bladder or lungs)

Be able to give the KINGDOM, PHYLUM, SUBPHYLUM, and CLASS for perch

Be able to give their Latin meanings.

BODY SYSTEMS

Be able to give a function/body system for all parts on Body Systems sheet

Be able to ID parts in a diagram (including Heart and Brain)

What is cephalization? Do fish have it?

Which organs produce BILE and TRYPSIN? What type of food do they digest?

Where do they work? Where are they stored? Where are nutrients absorbed in a fish? How do fish reproduce? What is a "FRY"?

How do fish get rid of their nitrogen waste? In what form?

What is osmoregulation? Which organs help with maintaining the ion/water balance?

How is osmoregulation different in a freshwater vs a marine fish?

What kind of coelom do fish have? Sexual/Asexual reproduction?

Hermaphrodites/separate sexes? Vertebrates/invertebrates?

Protostomes/Deuterostomes? Open/closed circulation? Internal/external fertilization?

Direct/Indirect development? What kind of symmetry do vertebrates have? What

kind of skeleton do fish have? What is GLYCOGEN? How do

INSULIN/GLUCAGON work to control blood sugar levels?

What is the endocrine system? What body functions does it control? What new organ belongs to this system? How are capillaries, veins, and arteries different? How many chambers are in a fish heart? (TWO) How do the CONUS ARTERIOSUS and SINUS VENOSUS help blood flow to and from heart? Be able to trace the path of blood flow in a fish's body? Where is the HIGH oxygen blood? Where is the LOW oxygen blood?

COMPARISONS

Know what the different body systems do.

What new parts/body systems have we not seen before?

(Liver, pancreas, duodenum, spleen, brain lobes, heart, caeca, urogenital pore)

How is nitrogen waste different from digestive waste?

Be able to compare FISH with invertebrates (Earthworms, Clams, Starfish, Crayfish)