# Quiz 8 Notes

# **VOCABULARY**

#### REVIEW VOCABULARY

Unicellular – single celled organism
Multicellular – many cells in the organism
Prokaryote – no nucleus in the cell
Eukaryote –nucleus in the cell
Autotroph – organism must make it's food
Heterotroph – organism must eat food

Notochord – present at least in the developing embryo\* of all chordates; made out of cartilage, the "primitive backbone" of vertebrates – it becomes part of the spinal column.

Dorsal nerve cord – located down the back, or dorsal, side of the embryo and develops into the brain and spinal cord of the adult

Gill slits – develop in the throat area during embryonic\* development

\* **EMBRYO** – unborn offspring in the process of development

Gills - Gills are flaps of tissue that strain dissolved oxygen out of the water. The circulatory system then delivers the oxygen to cells.

**Ectothermic** – internal body temperature controlled by the environment; "cold blooded"

Scales – cover the skin of most fish; vary in size, shape, and structure – can be strong and rigid to microscopic

**Fins** – wing-like or paddle-like appendage used for propulsion, steering, or balancing

# Review: Invertebrates – animals that \_\_ a \_\_

Phylum Porifera = sponges

Phylum Cnidaria = jellyfish, coral, sea anemones, hydra

Worms: Phylum Platyhelminthes = flatworms; Phylum Nematoda = round worms; and

Phylum Annelida = segmented worms

Phylum Mollusca = mollusks (gastropods, bivalves, cephalopods)

**Phylum Arthropoda** = arthropods (insects, arachnids, crustaceans, centipedes, millipedes)

Phylum Echinodermata = echinoderms

# **VERTEBRATES – Phylum Chordata (Chordates)**

Explain what makes a vertebrate an animal AND a vertebrate.

HINT: use three terms from the <u>Review Vocabulary</u> AND the vocabulary terms in the gray section (left).

# **FISHES**

# **BASIC CHARACTERISTICS:**

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Three Types of Fins:

#### **GROUPS of FISHES:**

#### Fishes

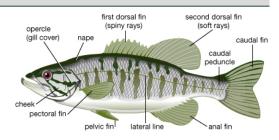
- Jaws are absent
- No bones Endoskeleton (skeleton INSIDE the body) is made of cartilage
- · Notochord is present in the adults
- Do not have paired fins
- Examples: \_\_\_

#### Fishes

- No bones Endoskeleton (skeleton INSIDE the body) is made of cartilage
- Teeth are not attached to the jaw
- Examples: \_\_\_

#### Fishes

- Have bones Endoskeleton (skeleton INSIDE the body) is made of bones
- Swim bladder inflates and deflates with air to help fish move to different depths in the water



Amphibian - means "both lives" or live in water then move to land

Lungs – to live on land, an animal needs lungs to get oxygen out of the air and into the blood

Permeable Skin – molecules of gasses can move through the skin

Metamorphosis – there is a transformation from egg to adult where the animal completely changes form from a larvae stage then grows to become the adult

Unshelled Eggs – offspring are hatched from eggs that do not have a shell; eggs must be in water

Amniotic Egg – does not require a water environment; has a tough outer shell for protection that allows oxygen to pass through so the embryo does not suffocate; the egg contains a sac called the amnion which hold amniotic fluid and keeps the embryo from drying out Examples: \_\_\_

# **AMPHIBIANS**

### **BASIC CHARACTERISTICS:**

1.



3.

4.

5.

6.

7.

8.

## **GROUPS of AMPHIBIANS:**

Shorter hind legs for walking or hopping

Skin dry and bumpy

• As adults, stay mostly on land

No teeth

Poison glands behind the eyes

• Examples: \_\_

Long powerful legs for jumping

Skin moist and smooth

Prefer moist to wet habitats

· Have teeth in the upper jaw

Eyes bulge out

Examples: \_\_\_

&

• Soft, moist skin – no scales, claws or ear openings

MOST transform gills to lungs; a few species do not (like the mudpuppy)

Eggs

· Four short legs for walking on land; four toes on the front feet

• Tail present

Examples: \_

\_ – *caecus* means "blind"

lack eyes or have small eyes under the skin;

look like worms and are modified for the burrowing life

live under ground in tropical areas.

# REPTILES

# **BASIC CHARACTERISTICS:**

1.

2.

3.

3. 4.

5.

6.

Tadpole

Adult frog







# **GROUPS of REPTILESS:**

 large, predatory, semiaquatic reptile distinguished by long jaws, short legs, and a powerful tail

Examples: \_\_\_

 a long limbless reptile that has no eyelids, a short tail, and jaws that are capable of considerable extension; some snakes have a venomous bite

•	Examples:
	a reptile that typically has a long body and tail, four legs, movable eyelids, and a rough, scaly, or spiny skin <a href="Examples">Examples</a> :
	a reptile that is enclosed in a scaly or leathery domed shell (the backbone is modified to make the shell) with four legs or the marine turtles have flippers for legs  Examples: