Test 2 Review

KNOW YOUR ANIMALS!!! - You should know the following individuals and to which phylum they belong. Know ALL the words on the page and their groups.

Porifera
- Sponges

Cnidaria
- Jellyfish
- Coral
- Sea anemones
- Hydra

Worms
- Flatworms (Platyhelminthes)
  - Tapeworms
  - Planaria
  - Marine flatworms
- Roundworms (Nematoda)
  - Ascaris
  - Pinworms
  - Heartworms
- Segmented Worms (Annelids)
  - Earthworms
  - Polychaetes (Bristleworms)
  - Leeches

Mollusca
- Bivalves
  - Clams
  - Oysters
  - Scallops
- Gastropoda
  - Snails
  - Slugs
- Cephalopoda
  - Octopuses
  - Squids
  - Nautilus
  - Cuttlefish

Arthropoda
- Trilobites
- Crustaceans
  - Crabs
  - Lobsters
  - Shrimp
  - Barnacles
  - Isopods (roll-up/pill bugs)
- Arachnids
  - Spiders
  - Scorpions
- Insects * Most plentiful!
  - Know the basic ones
- Others
  - Centipedes
  - Millipedes

Echinodermata
- Starfish
- Basket stars
- Sea lilies
- Sand dollars
- Sea urchins
- Sea cucumber

Know the following advancements and body parts: (see Biology Pg. 518 for help)

Porifera

First cell differentiation – two cell layers, pores, collar cells, both sexual and asexual reproduction. Sessile (non-moving) adults. Be able to diagram and draw the parts of a sponge.

Cnidaria

Stinging cells (nematocysts), radial symmetry, gastrovascular cavity, two forms – polyps and medusa (polyps are tentacles up and usually stationary, while medusa forms are tentacles down and mobile. They have developed a simple nervous system. Reproduction is asexual and sexual – sometime alternating.

Worms

Flatworms – Bilaterally symmetrical, no coelom, some are parasites. The tapeworms are flattened with a scolex. Some (planaria) are free-living and some have eyespots. Flatworms have flame cells that are simple excretory organs (like kidneys). Some aseuxal, mostly sexual reproduction (hermaphroditic) with internal fertilization.

Roundworms – Complete digestive tract. Many parasites. Pseudocoelom. Mostly sexual reproduction (some separate sexes).

Segmented Worms – hearts, true coelom, Closed circulation with hearts. Body segments seem to be ancestral of insects and other species.

Mollusks

Radula (tongue) for scraping, open circulation, some with high brain function. Mollusks have a shell, except for slugs, and some cephalopods. The nautilus and squid has an internal “pen” for rigidity, but this is lost in the octopus. Mantle present with gills – can serve as lung in snails.

Arthropods

Exoskeleton with jointed legs. Massive explosion of shelled animals in the Cambrian. Muscles present. Sexual separation, gills in aquatic species and book lungs in spiders. First flight (insects).

Echinoderms

Tube feet, deuterostome (anus forms first in digestive tract). Endoskeleton and spiny skin. Can evert stomach. Five-part body plan