Critter Challenge: Field Trip Preliminary

You have discovered a bunch of unknown critters in your field studies. Following each critter is a description of some characteristics you have been able to discern from careful lab or field observations of your unknowns. From the descriptions given you should be able to determine to which Phylum each of your unknowns belong. Use the Animal and Plant Kingdom Highlight Sheet, your text, and your classmates as possible sources to find your answers. Place your answers on the first page of the paper entitled “IDS Marine Field Observations”. Spelling counts. Please print your answers.

**Critter 1:** Upon cutting up this critter you find that it has blood filled cavities but no capillaries. Blood circulates throughout the body by way of blood sinuses. It also has many jointed appendages and a hard outside covering.

**Critter 2:** You find this delightful creature on the beach. It is diploblastic (contains only two germ layers – ectoderm and endoderm) and has a circle of stinging tentacles surrounding its mouth. When food is swallowed it enters a sac-like stomach. And although you search high and low you find that your critter has no anus.

**Critter 3:** Your lab partner finds a small, flat worm-like organism under a rock at the beach. As you are watching it, you are lucky enough to see it feeding on other small critters in its environment. As it feeds a long tube-like thingy extends from its mouth and sucks up the prey. You also notice that this critter has neither an anus nor any signs of segmentation. Upon dissection you also find that it has three germ layers but no fluid filled body cavity.

**Critter 4:** This beach critter has little flap-like feet on each of its many segments. Little bristles protrude from each of these flap-like structures. It also has a long tube that shoots out of its mouth. The tip of this tube is armed with four little fangs. When you dissect this critter you find that it has a fluid filled body cavity, bilateral symmetry, and an anus. What a find!!

**Critter 5:** This beach critter has many segments and plume like structures coming out of one end. It lives in a leathery tube it has constructed.

**Critter 7:** This critter has a hard outer covering all over its body. It also has many jointed appendages. It has bilateral symmetry and is a prime ingredient in scampi.

**Critter 8:** This critter has an internal skeleton made of calcium. It can be cut in more than one plane to produce mirror images. It has no heart or blood vessels and moves about by use of a water hydraulic system. It’s the top predator in the intertidal environment.
Critter 9: This creature has a shell that it secretes. It uses its gills both for breathing and eating. It has bilateral symmetry. All its internal organs are surrounded or wrapped in a unique sheet of tissue.

Critter 10: This critter is bell shaped with only two germ layers and stinging tentacles. You found it pulsating through the water.

Critter 11: You found this creature growing encrusted on a rock in the intertidal zone. Its body wall was made up of a protein-like substance and many long calcium needle-like structures. It had many small microscopic pores in its body wall. Each pore was lined with cells that had one long flagella.

Critter 12: This bizarre little creature has one large ventral foot. It is triploblastic. Its mouth is armed with a belt like structure armed with rows of tiny teeth. It rasps off plant material with this sandpaper like rasping organ. It has eight plates across its “back”.

Critter 13: Under a floating dock you snap up a round creature with a very hard body wall. It can be cut in more than one plane to produce mirror images. It has many small defensive pincers cover its body in addition to many retractable tube-like structures with which it holds onto the dock. It is also covered with moveable spines. Both the spines and the tube-like structures are used in locomotion.

Critter 14: This creature was found hooked to a floating dock at the local marina. At first glance it looked like a piece of seaweed. Closer examination, however, revealed that it was an animal that exhibits polymorphism. Its two major polymorphic stages are a medusa and a polyp. It has only two germ layers.