Supplemental Test Items to accompany OpenStax College *Concepts of Biology*. Note that not all chapters of OpenStax College *Concepts of Biology* have accompanying test items. Building on the community-oriented nature of OpenStax College resources, we invite you to submit items to be considered for future inclusion.

**Chapter 15: Diversity of Animals**

1. What is the major distinction scientists use to divide the animal kingdom? (Outcome #6b) (DOK 1)
   1. whether the animal has a vertebral column or not\*
   2. whether the animal has an endoskeleton or not
   3. whether the animal has an exoskeleton or not
2. The vast majority of animal species alive today belong to which major group? (Outcome #6b) (DOK 1)
   1. vertebrata
   2. invertebrates\*
   3. chordata
3. The simplest animal phylum consists of which animals and is called what? (Outcome #6b) (DOK 1)
   1. anemones, Anthrozoa
   2. sponges, Anthozoa
   3. sponges, Porifera\*
4. Which of the following classes have the defining life cycle feature of a prominent medusa form and a brief, minor polyp form? (Outcome #6b) (DOK 1)
   1. Schyphozoa (jellies)\*
   2. Anthozoa (anemones)
   3. Platyhelminthes (flatworms)
5. Which of the following is not a member of the phylum Arthropoda? (Outcome #6b) (DOK 1)
   1. spiders\*
   2. sea urchins
   3. millipedes
6. The most primitive vertebrates alive today are the \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_. (Outcome #6b) (DOK 1)
   1. sharks, rays
   2. hagfishes, lampreys\*
   3. tunicates, lancelets
7. The primary difference between amphibians and reptiles is what? (Outcome #6b) (DOK 1)
   1. Reptiles have teeth, whereas amphibians do not.
   2. Reptiles have an extra bone in the ear called the auricular operculum; amphibians do not.
   3. Amphibians have a moist, permeable skin, while reptiles have a dry, scaly skin.\*
8. All vertebrates are classified into the phylum Chordata, but this phylum also contains two groups of invertebrates, the \_\_\_\_\_\_\_\_\_\_ and the \_\_\_\_\_\_\_\_\_\_\_, (Outcome #6b) (DOK 2)
   1. Urochordata (tunicates), Cephalochordata (lancelets)\*
   2. Asteroidea (sea stars), Holothuroidea (sea slugs)
   3. Cephalopoda (octopi, squids, etc.), Scaphopoda (tusk and tooth shells)
9. How could you determine if a newly discovered animal were a vertebrate or an invertebrate? (Outcome #5) (DOK 3)
   1. test for the presence of a spinal column by dissection or x-ray\*
   2. test for the presence of DNA
   3. test for the ability of the organism to respond to stimuli with movement
10. Animals with bilateral symmetry have \_\_\_\_\_\_\_\_\_\_\_, which other animal do not: (Outcome #7) (DOK 2)
    1. a head and anus
    2. a shell
    3. a right and left side\*
11. Which of the following animals does not have a chambered heart? (Outcome #7) (DOK 1)
    1. sheep
    2. earthworm\*
    3. frog