18.1 True or False

____ 1. Sponges are terrestrial invertebrates.

____ 2. Adult sponges cannot move from place to place on their own.

____ 3. Because sponges evolved before other invertebrates, they do not have a skeleton.

____ 4. Bacteria are one food source for sponges.

____ 5. The function of a nematocyst is gamete (egg and sperm) production.

____ 6. Cnidarians have ectoderm, endoderm, and mesoderm.

____ 7. Some Cnidarians have a life cycle in which they alternate between medusa and polyp body forms.

____ 8. The planula is the larval form of Cnidarians.

____ 9. Corals have a mutualistic relationship with algae.

____ 10. Some flatworms are less than an inch long, while others are over 60 feet long.

____ 11. Flatworms have a respiratory system.

____ 12. Some flatworms are parasitic.

____ 13. Roundworms are round because they have pseudocoelom.

____ 14. Most roundworms reproduce asexually.

____ 15. Pinworms are a type of roundworm.

WHY DO WORMS ONLY
BUY THINGS ON SALE?

BECAUSE THEY ARE
DIRT CHEAP!
Read these passages from the text and answer the questions that follow.

Ecology of Flatworms

Both flukes and tapeworms are parasites with vertebrate hosts, including human hosts. Flukes live in the host’s circulatory system or liver. Tapeworms live in the host’s digestive system. Usually, more than one type of host is required to complete the parasite’s life cycle. Look at the life cycle of the liver fluke in the diagram below. As an adult, the fluke has a vertebrate host. As a larva, it has an invertebrate host. If you follow the life cycle, you can see how each host becomes infected so the fluke can continue its life cycle.

Life Cycle of the Sheep Liver Fluke. The sheep liver fluke has a complicated life cycle with two hosts.

(Image courtesy of the Centers for Disease Control and Prevention and under the public domain.)
1. What are some major characteristics shared by tapeworms and flukes?

2. Where does the fluke described in the reading above live in humans?

3. What is another host of the liver fluke?

4. When does the fluke live in this host?

5. How does it get from the human host to this host?
18.1 Vocabulary I

Definitions

_____ 1. invertebrate phylum of flatworms that are characterized by a flat body because they lack a coelom or pseudocoelom

_____ 2. animal that obtains organic matter for nutrition by filtering particles out of water

_____ 3. invertebrate phylum of sponges, which have a non-bony endoskeleton and are sessile as adults

_____ 4. basic body plan in cnidarians such as jellyfish that is bell-shaped and typically motile

_____ 5. structure responsible for digesting food in sponges

_____ 6. basic body plan in cnidarians such as jellyfish that is tubular in shape and typically sessile

_____ 7. invertebrate phylum that includes animals such as jellyfish and corals that are characterized by radial symmetry, tissues, and a stinger called a nematocyst

_____ 8. a structure that detects touch in Cnidaridians

_____ 9. phylum of invertebrates called roundworms, which have a pseudocoelom and complete digestive system

_____ 10. a hard endoskeleton that provides support and protection in sponges

_____ 11. internal skeleton that provides support and protection

_____ 12. of or relating to an animal that is unable to move from place to place

Terms

a. Cnidaria
b. collar cell
c. endoskeleton
d. filter feeder
e. medusa
f. Nematoda
g. nerve net
h. Platyhelminthes
i. polyp
j. Porifera
k. sessile
l. spicule

What fish make the best sandwich?
A peanut butter and jellyfish
18.1 Multiple Choice

1. Members of the Porifera phylum have
   a. no skeleton.
   b. an exoskeleton.
   c. an endoskeleton.
   d. either an exoskeleton or endoskeleton, depending on the species.

2. Sponges reproduce
   a. sexually in a way favoring cross-fertilization.
   b. sexually in a way favoring self-fertilization.
   c. asexually with sperm only.
   d. none of the above

3. Sponges can protect themselves against predators by
   a. moving away from the predator.
   b. making toxins to poison predators.
   c. using their muscles.
   d. a and b

4. The motile stages of the Cnidarian life cycle include the
   a. polyp stage.
   b. larval stage.
   c. medusa stage.
   d. b and c

5. The phylum with endoderm, mesoderm, and ectoderm is
   a. Cnidaria.
   b. Porifera.
   c. Platyhelminthes.
   d. all of the above.

6. Liver flukes
   a. live in a snail host during part of their life cycle, and in a human during another part of their life cycle.
   b. live in invertebrate hosts only.
   c. live in vertebrates hosts only.
   d. are free-living.

7. Roundworms have
   a. a complete digestive system.
   b. a psuedocoelom.
   c. muscles.
   d. all of the above.

8. Pinworm eggs
   a. are a type of egg made by flatworms.
   b. are made in the soil.
   c. are made in the host’s digestive tract.
   d. are never found in the United States.

Symptoms of pinworm infection:

Pinworm infection causes itching around the anus which can lead to difficulty sleeping. The itching is caused by the female pinworm laying her eggs. Symptoms are usually mild and some people don’t have any symptoms at all!
18.1 Vocabulary II

1. With respect to how they get food, sponges are __________.

2. The polyp and medusa forms are typical of __________.

3. __________ are short, sharp rods made of silica, calcium carbonate, or spongin.

4. Flatworms are in the phylum __________.

5. Instead of a brain, Cnidarians detect stimuli with a __________.

6. An internal skeleton is called __________.

7. The flagella-containing, food vacuole-containing cells in the Porifera are __________.

8. A typically motile adult body plan in Cnidarians is the __________.

9. Roundworms are in the phylum __________.

10. An adult animal that stays in one place is said to be __________.

11. Sponges are in the phylum __________.

12. A non-motile adult body plan in Cnidarians is the __________.

What do you get when you put a sponge in water?
A wet sponge!
Har har har!

Are you serious? You told THAT as a joke? That’s not even funny. I didn’t laugh one bit.