

## Sponges

Sponges are in the phylum \_\_\_\_\_ which means \_\_\_\_\_.

Sponges live their entire life \_\_\_\_\_ to a single spot. An animal that does not move is considered to be \_\_\_\_\_.

Sponges are classified as animals because:

- 1.
- 2.
- 3.
- 4.

Sponges do not have a \_\_\_\_\_ or a \_\_\_\_\_, and they have no tissues or \_\_\_\_\_ systems.

Sponges are \_\_\_\_\_, they have no \_\_\_\_\_ or \_\_\_\_\_ ends and no left or right \_\_\_\_\_.

The body of a sponge forms a wall around a large central \_\_\_\_\_ through which water is \_\_\_\_\_ continually.

Water enters through \_\_\_\_\_ located in the body wall and leaves through the \_\_\_\_\_, a large hole at the top of the sponge.

Draw a sponge below and label the osculum, pores and direction of water flow.

Choanocytes are \_\_\_\_\_ cells that use \_\_\_\_\_ to move a steady current of water through the sponge. Add Choanocytes to your sponge drawing.

A spicule is a \_\_\_\_\_-shaped structure made of calcium carbonate and silica.

Spicules give the sponge body \_\_\_\_\_ in the place of bones.

Sponges are \_\_\_\_\_ feeders. As water moves through the sponge, \_\_\_\_\_ particles are trapped and engulfed by choanocytes that line the body cavity.

Sponges reproduce \_\_\_\_\_ or asexually. The eggs are fertilized inside the sponge's body, in a process called \_\_\_\_\_ fertilization.

Why are sponges important in aquatic ecology?

- 1.
- 2.

