

1. Why are sponges classified as animals?

because they are heterotrophic, multicellular and eukaryotic and lack cell walls

2. Why is the movement of water key to a sponge's survival?

Because it provides a simple mechanism for feeding, respiration, circulation and excretion.

*Match the terms on the left with the definitions on the right.*

3. C osculum

4. B spiculus

5. A pores

6. E choanocytes

7. D archaeocytes

a. water moves into the central cavity through these small openings

b. spike-shaped structures that make up a simple skeleton

c. large opening at the top of the sponge where water exits

d. specialized cells that move around within the walls of the sponge, making spicules and digesting and transporting food

e. cells that use flagella to move water through the sponge to trap food

8. Describe how a sponge feeds.

They are filter feeders that sift their food from the water. The choanocytes create a current to bring water in and also trap food particles which are digested by the archaeocytes.

9. What triggers a sponge to produce gemmules?

When the environment is not ideal for reproduction.