Name	=	

Sponges (p. 618 – 621)

I. The Simplest Anin	<u> 1als</u>
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Poritera____. (Not in the book) 1. Sponges are placed in the phylum

2. Sponges are animals.

Circle One:

True

1) Heterotrophic 3) Specialized Cells 3) No cell walls (9) Multicellulor

3. Describe the body of a sponge.

- Musses of specialized cells embedded in a gel-like substance

4. Sponge cells are not organized into tissues and organs.

Circle One:

True

False

5. Match the anatomical terms of a sponge with the correct definitions.

1. A Mesophyl

A. Gel-like substance found in the interior of sponges.

2. B Ostia

B. "Pore Cells"; Tiny openings through which water enters.

3. Osculum

C. Specialized cells that pick up nutrients from collar cells.

Choanocytes D. Large opening through which water exits sponges.

Amoebocytes E. "Collar Cells"; Flagellated cells - move water in sponges.

6. Define the term sessile.

Sessile - live their entire adult life attached to a single spot + do not move
7. What does the movement of water through a sponge provide?

Mechanism for feeding respiration circulation + excretion

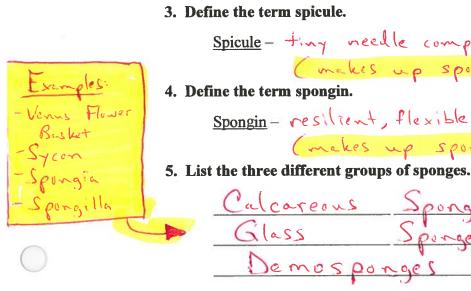
8. Where does digestion take place in sponges?

- Intracellalan (incide the cells

- 9. Circle the letter of each sentence that is true about sponges. (Not in the book.)
 - (a.) Sponges are filter feeders.
 - b. Sponges reproduce only asexually.
 - (c.) Sponges rely on water movement to carry out body functions.
 - d. Sponges do not have a nervous system.



Name
onge Diversity
1. What do folds in a sponge's body provide?
- Increase sponge size + surface area
2. A sponge has a skeleton.
<u>Circle One</u> : False
3. Define the term spicule.
Spicule - tiny needle composed of silica or calcium carbone
(makes up sponge skeleton)
4. Define the term spongin.
Spongin - resilient, flexible protein fiber
(makes up sponge skeleton)
5. List the three different groups of sponges.
Calcareous Sponges - spicules composed of calcium carbonates Glass - spicules made of silica Demos ponges - spicules made of silica and spongin
eproduction
1. Circle the letter of each type of reproduction that can occur with sponges.
a. Regeneration (asexual) b. Budding (asexual) c. Gemmule formation (asexual) d. Sexual Reproduction
2. New sponges can form from fragments of a single sponge.
Circle One: True False Regeneration
3. Define the term gemmule. (3) Gemmule - clusters of amoebocytes surrounded by a tough layer of spicules
A WATER TO THE CO.



II. Sponge Diversity

III. Reproduction

4. When do gemmules typically form?

Circle One:

- Harch conditions (Freezing

True

5. Most sponges are hermaphrodites (capable of producing sperm and eggs).

False