

Hydra Lab Worksheet

Name _____

Cnidaria	streams	jellyfish
tentacles	looping	stinging
ingest	sex cells	regenerate
tissue	excrete	budding
ponds	separate	multicellular
creeping	paralyze	organism
hermaphroditic	cells	

Part A: Use the words in the word list to complete this article about the hydra.

Hydra and (1)_____ are members of the phylum (2)_____. They all have soft bodies made up of two or more layers of (3)_____, or the building blocks of living things. They also have stinging (4)_____ arranged in circles around their mouth.

Hydras live in quiet freshwater (5)_____ or (6)_____. At the top of its thin, stalk-like body is a mouth opening used to (7)_____ food and (8)_____ waste. The mouth is surrounded by four to five tentacles that have (9)_____ cells. The hydra use these cells to (10)_____ the small marine creatures that they eat.

Hydras move by either (11)_____ on its stalk or (12)_____, which is flipping end over end.

One of the animal's many unusual characteristics is the ability to regrow, or (13)_____ parts of its body. All living things can replace damaged parts; however, the hydra can recreate a whole new (15)_____, or living thing, from a slice of tissue.

The hydra is one of the oldest of the many-celled, or (16)_____, animals. Individuals are usually (17)_____, since they contain the reproductive organs of both sexes. In one way they may release gametes, or (18)_____ that will be fertilized in the water. Another way they reproduce is through a process called (19)_____ during which small "buds" of the hydra's body will grow and break off or (20)_____ to form a new hydra.

Part B: READ DIRECTIONS CAREFULLY BEFORE BEGINNING THIS LAB! Failure to follow directions will result in loss of lab privileges!

STEP 1: Obtain a slide and hydra from your teacher. Carefully put the slide on the stage of your microscope. Using the lowest powered objective (the shortest one), find your hydra. Draw and label your hydra in the space below.

LABEL:

Mouth

Tentacles

Stalk (or body)

STEP 2: GENTLY (very gently) touch the hydra's tentacles with a toothpick. Be careful not to smash your hydra. What did you observe?

STEP 3: CAREFULLY place a flake of fish food next to the hydra. Observe its actions for 5 minutes. What did you observe?

PART C: Analysis/Conclusion

What characteristics of living things does the hydra exhibit (or show)? List 2 or more characteristics that you have observed during this lab.