

FLATWORMS: THE FIRST HUNTER

Guided Practice: Watch the movie **Flatworms: The First Hunter**

California Standards

4.g. Significant developments of animal life

5.a. Animals have levels of organization for structure and function, including cells, tissues, organs, organ systems, and the whole organism.

Middle School NGSS

MS-LS1.A - Structure and Function: In multicellular organisms, the body is a system of multiple interacting subsystems. These subsystems are groups of cells that work together to form tissues and organs that are specialized for particular body functions.

MS-LS1.B - Animals engage in characteristic behaviors that increase the odds of reproduction.

MS-LS1.D - Sense receptors transmit signals along nerve cells to the brain, resulting in behaviors.

1. In what ways is the flatworm's body adapted to be a hunter?
2. What other kinds of animals were around when the flatworm ancestor first evolved?
3. How many flatworms have evolved in the ocean?
4. What habitats do modern flatworms live in?
5. What traits do we see in a modern planarian that suggest how an ancient worm became an active hunter?
6. Planarians are believed to have evolved the first pair of _____ to help them see l_____.
7. What structures on the Planarian evolved to help it move fast over the ocean floor?

8. Explain how stereo senses help an animal hunt.

9. Where is the mouth on a planarian?

10. What is the function of the pharynx?

11. The first hunter, the flatworm, was also the first to evolve what type of fertilization?

12. What becomes the function of the flatworm that is pierced during “fencing”?

13. What is a hermaphroditic worm?

14. What is the evolutionary advantage of being hermaphroditic?

15. Worms were the first to give g_____ instructions for their cells to build a body with a
b_____, e_____, and bi-_____ shape.

16. What is the basic blueprint for an active hunter?