# Host or Hunter

Compare two ways animals obtain food and complete their life cycles

**ZOO.4.2** "Differentiate between parasitic and free living."

NAME _____ DATE _____

## 1 READ AND MARK

Read it twice

**YOUR JOB** Underline two details showing how the marine flatworm lives without a host, and circle two details showing how the tapeworm depends on a host.

### Two Flatworms, Two Lifestyles

1. At low tide, a marine flatworm slides beneath a rock and searches for tiny worms to eat. It finds prey, captures it, and digests it. The flatworm lives among rocks and along the seafloor, where it must locate food and avoid predators. It does not need another animal's body as a place to live or a steady source of food. Biologists call this way of life *free-living*. The flatworm still depends on other organisms for energy, but no individual animal serves as its host.

2. Inside a fish, a tapeworm follows a different plan. As an adult, it attaches to the fish's intestine and absorbs nutrients from food the fish has eaten. The fish is the tapeworm's host: it provides both a place to live and a source of nutrients. This relationship is *parasitic* because the tapeworm benefits while the host loses some nutrients and may be harmed. Unlike the hunting flatworm, the adult tapeworm cannot simply leave the fish, catch prey, and complete its life cycle on the seafloor. It relies on a host to mature and reproduce.

3. Imagine finding a tapeworm egg drifting through the water. Is it free-living because it is outside a fish? No. The egg is a stage in a parasite's life cycle, not an independent hunter. For this tapeworm to develop into a reproducing adult, it must enter suitable hosts. To tell the two lifestyles apart, ask what each animal needs to grow and reproduce. A predator may kill and eat many prey animals without living in or on them. A parasite lives in or on a host during part of its life cycle and takes resources from that host.

## 2 ANSWER WITH EVIDENCE

Use the passage

1. Why is the marine flatworm free-living even though it eats other animals?

2. What makes the adult tapeworm parasitic rather than free-living?

3. Both flatworms get nutrients from other animals. What is the key difference in how they get them?

4. A tapeworm egg is drifting outside a fish. Does that make the tapeworm free-living? Explain.

## 3 YOUR TURN

Your own words

Invent two aquatic animals, one free-living and one parasitic. In four sentences, describe where each lives and gets food, then explain why only one needs a host to reach adulthood.

# Host or Hunter



## PART 1 · READ AND MARK

Underline two details showing how the marine flatworm lives without a host, and circle two details showing how the tapeworm depends on a host. Accept any marking that follows this job and points at the right text.

## PART 2 · ANSWERS

| # | QUESTION | ANSWER |
|---|---|---|
| 1 | Why is the marine flatworm free-living even though it eats other animals? | **It hunts prey but does not live in or on a host or need one to provide a steady food source.** |
| 2 | What makes the adult tapeworm parasitic rather than free-living? | **It lives in a fish's intestine and takes nutrients from food the fish has eaten, which can harm the fish.** |
| 3 | Both flatworms get nutrients from other animals. What is the key difference in how they get them? | **The marine flatworm captures prey, while the tapeworm lives in a host and absorbs nutrients from the host's food.** |
| 4 | A tapeworm egg is drifting outside a fish. Does that make the tapeworm free-living? Explain. | **No. The egg is one stage of a parasite whose life cycle requires suitable hosts for it to become a reproducing adult.** |

## PART 3 · YOUR TURN (SAMPLE ANSWER)

The invented pebble skimmer lives among stream stones and hunts insect larvae for food. It can grow and reproduce without living in or on another animal. The invented gill thread lives on a fish's gills and takes nutrients from the fish's blood, which can harm the fish. It needs a fish host to reach adulthood, so it is parasitic, while the pebble skimmer is free-living.

Accept invented animals with plausible feeding relationships. The parasitic animal must take resources from a host, while the free-living animal must be able to reach adulthood without one.