Tide Pool Detectives

Use science vocabulary and academic language to follow an investigation.

6.RV.1.A "Develop and accurately use general academic language and content-specific vocabulary by listening to, reading, and discussing a variety of grade-six texts and topics."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Circle content-specific vocabulary about tide-pool science. Underline general academic words that help explain thinking, evidence, or conclusions.

Life Between the Tides

1. At low tide, a rocky shore becomes a tide pool habitat, a small area of seawater trapped among rocks. Sea stars, crabs, algae, and tiny fish may live there. Each organism faces changing conditions. Sun can warm the shallow water, while waves can suddenly refill the pool. An organism that cannot handle heat, salt changes, or strong water movement may not survive. Scientists observe tide pools to learn how living things adapt to a challenging environment.

2. One adaptation is a trait that helps an organism live in its environment. For example, a limpet is a small snail with a cone-shaped shell. When the tide goes out, it grips a rock tightly. Its shell helps reduce water loss, and its grip can keep waves from carrying it away. These traits do not mean every limpet survives. Instead, they increase its chance of survival. Researchers collect evidence by measuring water temperature, counting organisms, and recording where each species is found.

3. Scientists also analyze patterns in their observations. Suppose crabs are common in shaded pools but rare in sunny pools. This pattern could suggest that shade influences where the crabs stay. However, scientists would need more evidence before making a firm conclusion. Other factors, such as food, predators, or the pool's depth, might also influence crab numbers. Careful scientists distinguish an observation, which is something noticed or measured, from an inference, which is an explanation based on evidence. This distinction helps them communicate accurate conclusions.

2 ANSWER WITH EVIDENCE

Use the passage

1. What does the word organism mean in paragraph 1? Use a detail from the paragraph to explain.

2. How does paragraph 2 define adaptation? Give the meaning and one limpet trait that is an adaptation.

3. What evidence do researchers collect in paragraph 2? Name two kinds of evidence.

4. What observation leads scientists to infer that shade might influence where crabs stay? Why do scientists need more evidence?

3 YOUR TURN

Your own words

Write exactly two sentences about an imaginary tide-pool investigation. In the first sentence, state an observation using one content-specific word from the passage. In the second sentence, give an inference and use evidence or influence correctly.

ANSWER KEY

Tide Pool Detectives

GRADE 6 · 6.RV.1.A

PART 1 · READ AND MARK

Circle content-specific vocabulary about tide-pool science. Underline general academic words that help explain thinking, evidence, or conclusions. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What does the word organism mean in paragraph 1? Use a detail from the paragraph to explain.	**An organism is a living thing, such as a sea star, crab, algae, or tiny fish.**
2	How does paragraph 2 define adaptation? Give the meaning and one limpet trait that is an adaptation.	**An adaptation is a trait that helps an organism live in its environment. A limpet's shell reduces water loss, or its grip helps it stay on a rock.**
3	What evidence do researchers collect in paragraph 2? Name two kinds of evidence.	**They measure water temperature, count organisms, and record where each species is found. Any two are correct.**
4	What observation leads scientists to infer that shade might influence where crabs stay? Why do scientists need more evidence?	**Crabs are common in shaded pools but rare in sunny pools. Scientists need more evidence because food, predators, depth, or other factors might also affect crab numbers.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

In one tide pool, researchers observed more limpets on shaded rocks than on sunny rocks. This evidence may suggest that shade influences where limpets remain.

For Part 3, check that the first sentence is an observation, the second is an evidence-based inference, and both required vocabulary uses are accurate.