Words Below Water

Use word parts and context to unlock science vocabulary.

6.RV.1.C "Apply knowledge of Greek and Latin roots and affixes to predict the meaning of unfamiliar words."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline submersible, bioluminescent, translucent, and hydrothermal. Circle a Greek or Latin root or affix in each word, then number a nearby context clue that helps you predict its meaning.

A Dive to the Deep

1. At night, a research team lowered an unmanned submersible into the Pacific Ocean. The vehicle carried cameras, lights, and a manipulator, a mechanical arm that can collect small objects. Far below the surface, sunlight could not reach the water. The scientists watched on a screen as the submersible moved past coral, fish, and drifting particles. Its strong lamps revealed a habitat that few people have seen directly during a deep-sea expedition near an underwater mountain.

2. Near the seafloor, the camera recorded a bioluminescent squid. In the dark water, its body gave off brief blue-green flashes. The squid released a cloud of ink and vanished behind a rock. The crew also saw translucent shrimp near the lamps. Light passed through their nearly clear bodies, making their internal shapes faintly visible. These animals were part of a community adapted to conditions of darkness, cold, and enormous pressure on the ocean floor below them.

3. At one site, the submersible approached a hydrothermal vent, an opening in Earth's crust that releases heated, mineral-rich water. The vent formed near volcanic rock, where seawater became hot underground. Around it grew giant tube worms and tiny microorganisms. The team collected water samples to study these small living things. Unlike plants, many vent organisms use chemicals from the water as an energy source. That process supports a crowded ecosystem in a place without sunlight.

2 ANSWER WITH EVIDENCE

Use the passage

1. The prefix sub- can mean under. What does submersible most likely mean in paragraph 1? Use one passage detail to support your answer.

2. The Greek form bio means life, and the Latin root lumin means light. What does bioluminescent most likely mean? Which detail in paragraph 2 supports your prediction?

3. The Latin root luc means light. What does translucent most likely mean in paragraph 2? Explain how the description of the shrimp supports your answer.

4. The Greek forms hydro and therm mean water and heat. Predict the meaning of hydrothermal in paragraph 3, then use a detail from the passage to check your prediction.

3 YOUR TURN

Your own words

Choose microorganisms from paragraph 3. Write exactly two sentences: explain what the prefix micro- helps you predict about the word, then quote or describe one passage detail that supports your prediction.

ANSWER KEY

Words Below Water

GRADE 6 · 6.RV.1.C

PART 1 · READ AND MARK

Underline submersible, bioluminescent, translucent, and hydrothermal. Circle a Greek or Latin root or affix in each word, then number a nearby context clue that helps you predict its meaning. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	The prefix sub- can mean under. What does submersible most likely mean in paragraph 1? Use one passage detail to support your answer.	**A submersible is a vehicle that goes under water. It was lowered into the ocean and traveled far below the surface.**
2	The Greek form bio means life, and the Latin root lumin means light. What does bioluminescent most likely mean? Which detail in paragraph 2 supports your prediction?	**Bioluminescent means producing light from a living thing. The squid gave off blue-green flashes in dark water.**
3	The Latin root luc means light. What does translucent most likely mean in paragraph 2? Explain how the description of the shrimp supports your answer.	**Translucent means allowing some light to pass through. Light passed through the shrimp's nearly clear bodies, and their internal shapes were faintly visible.**
4	The Greek forms hydro and therm mean water and heat. Predict the meaning of hydrothermal in paragraph 3, then use a detail from the passage to check your prediction.	**Hydrothermal means involving hot water. The vent released heated water, and seawater became hot underground.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

The prefix micro- helps me predict that microorganisms are very small living things. The passage says they are tiny, and the team collected water samples to study them.

Accept equivalent predictions that connect each Greek or Latin word part to the passage context. For Part 3, accept two sentences that identify micro- as meaning small and support that meaning with an accurate detail from paragraph 3.