

Hidden Word Clues

Use Greek and Latin roots to unlock science words.

CCSS.ELA-Literacy.L.5.4b "Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis)."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline four words whose Greek roots help explain their meanings. In the margin, write a short meaning for each word using its parts and the sentence around it.

Life Around Hot Springs

- ① At Yellowstone National Park, colorful hot springs form where heated water reaches the ground. The water is warmed by geothermal energy below the park. A visitor can see steam drifting above a pool, but the strongest heat is deeper underground. Rangers watch these changing places carefully because hot water, gas, and pressure can affect nearby trails.
- ② To measure a spring safely, a ranger may lower a thermometer on a long pole. The tool shows the water's temperature without requiring the ranger to touch the pool. A reading can reveal whether a spring is getting hotter or cooler. Rangers compare measurements over time and close an area if conditions become dangerous for visitors.
- ③ Even in very hot water, tiny organisms can live. Scientists collect a small sample and use a microscope to view them. Some of these microbes turn sunlight into food, while others use chemicals from the water. Learning about this hidden life helps scientists understand how living things survive in extreme environments on Earth and possibly on other planets.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 The roots geo and therm mean earth and heat. What does geothermal energy mean in paragraph 1?

2 The word thermometer includes therm, meaning heat, and meter, meaning measure. What does the word tell you a thermometer does?

3 The roots micro and scope mean small and look or view. What does microscope mean in paragraph 3?

4 How does the root micro help explain why scientists use a microscope to study microbes?

3 YOUR TURN _____ Your own words

Create a new name for a tool that helps scientists study something small in nature. In exactly two sentences, write your word, name at least one Greek or Latin root and its meaning, and explain what the tool does.

PART 1 • READ AND MARK

Underline four words whose Greek roots help explain their meanings. In the margin, write a short meaning for each word using its parts and the sentence around it. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	The roots geo and therm mean earth and heat. What does geothermal energy mean in paragraph 1?	energy from heat inside or below Earth
2	The word thermometer includes therm, meaning heat, and meter, meaning measure. What does the word tell you a thermometer does?	It measures heat or temperature.
3	The roots micro and scope mean small and look or view. What does microscope mean in paragraph 3?	a tool used to view small things
4	How does the root micro help explain why scientists use a microscope to study microbes?	Micro means small. Microbes are tiny organisms, and a microscope helps scientists view tiny things.

PART 3 • YOUR TURN (SAMPLE ANSWER)

My microleafscope uses micro, meaning small, and scope, meaning look. It helps scientists view tiny leaves and learn how they grow.

Accept clear meanings that connect the roots to the passage context. For Part 3, accept original tool names that use at least one accurate Greek or Latin root and include exactly two sentences.