

Volcano Word Detectives

Use word parts and context to unlock science words.

ELA.4.V.1.2 “Apply knowledge of common Greek and Latin roots, base words, and affixes to determine the meaning of unfamiliar words in grade-level content.”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline four words in the passage that have a prefix, root or base word, or suffix. Circle the word part that gives a clue, then write a short meaning beside each underlined word.

Watching a Volcano

- ① On a rocky island, geologists study a volcano and the Earth beneath it. Scientists measure small shakes and collect rock samples. Their work helps them learn how the volcano changed over time. They cannot know exactly when it will erupt, but careful records can reveal useful patterns. At a nearby station, a computer stores each measurement for the team.
- ② Before a visit, workers transport water, food, and tools to the station. They also inspect the paths that lead up the slope. During an inspection, a worker looks closely for cracks, loose stones, or steam. Keeping supplies portable is important because workers may need to carry them quickly if the volcano becomes more active without vehicles.
- ③ Scientists sometimes use a seismograph to record ground motion. The device makes a line that shows how the ground moved. Team members compare new lines with older ones. If the lines change, they may recheck their equipment and share the information with others. This process helps the group communicate clearly about changes near the volcano.

2 ANSWER WITH EVIDENCE Use the passage

- 1 Look at geologists. What does the root geo most likely mean? Which passage detail supports your idea?

- 2 In transport, what does the base word port most likely mean? Use the details about what workers bring to the station.

- 3 The word inspect has a prefix and a base word. Based on the worker's job, what does inspect mean?

- 4 What does the suffix -able help you understand about portable supplies?

3 YOUR TURN Your own words

Write two sentences about a science tool or event. In the first sentence, use and underline a new word with a Greek or Latin root, base word, prefix, or suffix. In the second sentence, explain what the word part means and how it helps you understand the word.

PART 1 • READ AND MARK

Underline four words in the passage that have a prefix, root or base word, or suffix. Circle the word part that gives a clue, then write a short meaning beside each underlined word. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Look at geologists. What does the root geo most likely mean? Which passage detail supports your idea?	Geo means Earth or ground. Geologists study a volcano and the Earth beneath it.
2	In transport, what does the base word port most likely mean? Use the details about what workers bring to the station.	Port means carry or move.
3	The word inspect has a prefix and a base word. Based on the worker's job, what does inspect mean?	Inspect means to look closely at or check.
4	What does the suffix -able help you understand about portable supplies?	Portable supplies can be carried or moved easily.

PART 3 • YOUR TURN (SAMPLE ANSWER)

A __telescope__ helps scientists view distant stars. In telescope, tele means far and scope means look, so the word names a tool for looking far away.

Accept equivalent meanings such as ground for geo, move for port, and examine for inspect. For the open task, accept any accurate word-part explanation and a sentence that uses the new word correctly.