Volcano Word Detectives

Use syllable patterns to decode science vocabulary.

ELA.612.F.2.2 "Know and apply phonics and word analysis skills in decoding words. a. Use an array of strategies to decode single-syllable and multisyllabic words. b..."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Circle 10 multisyllabic words in the passage. Draw slashes between the syllables in each word to show how you can decode it.

Watching a Volcano

1. Deep beneath some mountains, melted rock collects in spaces called magma chambers. When pressure rises, the rock may move upward through cracks in Earth's crust. A volcano is an opening where magma, gas, and ash can reach the surface. Before an eruption, gases can expand and push on the surrounding rock. This pressure does not always cause an eruption, but scientists watch for clues such as small earthquakes, changing ground shape, and increasing gas release.

2. During quiet periods, observatories use seismographs to record vibrations beneath a volcano. A seismograph makes a line that shows how the ground moves over time. Scientists also collect gas samples and use satellites to measure tiny changes in elevation. These measurements help researchers compare normal activity with unusual activity. No single signal can predict every eruption. Instead, scientists combine several observations before they advise nearby communities about possible hazards in their region.

3. Volcanic ash is made of tiny pieces of rock, minerals, and volcanic glass. It is not the soft ash left after wood burns. Ash can travel far when wind carries it through the atmosphere. Fine particles may irritate eyes and lungs, so people need protection during heavy ashfall. Pilots avoid ash clouds because the particles can damage aircraft engines. After ash settles, rain can form a thick, muddy flow called a lahar, which can move downhill.

2 ANSWER WITH EVIDENCE

Use the passage

1. Find eruption in paragraph 1. Write it with syllable slashes, then write the sound made by -tion.

2. Find seismograph in paragraph 2. Write it with syllable slashes and state how many syllables it has.

3. Find measurements in paragraph 2. Write the base word and the two added endings that build the word.

4. In paragraph 3, find the compound word connected to pilots. Divide it into its two smaller words.

3 YOUR TURN

Your own words

Choose two multisyllabic words from the passage that are not named in Part 2. Write each word with syllable slashes, then name one spelling pattern that helps you read one of the words.

ANSWER KEY

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GRADE 6 · ELA.612.F.2.2

PART 1 · READ AND MARK

Circle 10 multisyllabic words in the passage. Draw slashes between the syllables in each word to show how you can decode it. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Find eruption in paragraph 1. Write it with syllable slashes, then write the sound made by -tion.	**e/rup/tion; -tion makes the /shun/ sound.**
2	Find seismograph in paragraph 2. Write it with syllable slashes and state how many syllables it has.	**seis/mo/graph; 3 syllables.**
3	Find measurements in paragraph 2. Write the base word and the two added endings that build the word.	**measure + -ment + -s**
4	In paragraph 3, find the compound word connected to pilots. Divide it into its two smaller words.	**air + craft**

PART 3 · YOUR TURN (SAMPLE ANSWER)

vi/bra/tions; at/mo/sphere. In vibrations, -tion signals the /shun/ sound before the final s.

Accept standard pronunciations and reasonable syllable divisions that match spoken syllables. For Part 3, accept any two eligible multisyllabic passage words and a correct spelling pattern or word-part clue.