Ruins and Roots

Use word parts to uncover meaning in an archaeological investigation.

11.RV.1.C "Use structural analysis of roots, affixes, and etymology to understand the meanings of unfamiliar and complex words."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline noninvasive, asymmetrical, inconclusive, and geologist. Circle the prefix, suffix, or root that helps you infer each meaning, then write a 2- to 4-word meaning beside each word.

The Hidden Chamber

1 On a windswept island off Scotland, a research team studies a stone chamber built more than five thousand years ago. Rather than remove every object, the archaeologists use noninvasive tools, including ground-penetrating radar and small cameras. This approach protects fragile surfaces while revealing possible spaces behind the walls. A computer map showed an asymmetrical hollow near the chamber's entrance. Its unusual outline prompted discussion, and the team planned a careful inspection. Their work joined local historians, engineers, and conservators, whose goals sometimes differed but were ultimately compatible.

2 At the hollow, a sensor recorded a faint variation in moisture. The evidence was inconclusive, so the researchers avoided a dramatic announcement. They compared readings taken after rain with readings from dry weeks and noticed a recurring pattern. Water seemed to enter through a narrow fracture, then disappear below the floor. A geologist proposed that the chamber's builders had created a drainage route, perhaps to prevent seasonal flooding. The proposal remained hypothetical until further testing could determine whether the route was intentional or formed naturally over centuries of weather.

3 The team later examined microscopic grains caught in a crack. Some grains were pollen, but others appeared to be mineral fragments carried by flowing water. This mixture complicated the analysis because material from several periods may have collected in the same place. Still, the researchers could reconstruct part of the chamber's environmental history by comparing the grains with samples from nearby soil. Their report described the site as a palimpsest, a word borrowed from Greek through Latin, because later changes had left traces over earlier evidence. The report did not claim final certainty, but it gave future investigators a focused question.

2 ANSWER WITH EVIDENCE

Use the passage

1. In noninvasive, what does the prefix non- contribute? Use it and invasive to infer what the tools do not do.

2. The prefix a- can mean “not” or “without.” What does asymmetrical suggest about the hollow's shape?

3. Break inconclusive into in- and conclusive. What does the word say about how certain the evidence is?

4. Greek geo means “earth,” and -logist means “a person who studies.” Based on these parts, what kind of specialist is a geologist?

3 YOUR TURN

Your own words

Invent a plausible term for a tool or finding at a different historical site. Write exactly 2 sentences that use a Greek or Latin root and an affix, then explain how the word parts reveal the term's meaning.

ANSWER KEY

Ruins and Roots

GRADE 11 · 11.RV.1.C

PART 1 · READ AND MARK

Underline noninvasive, asymmetrical, inconclusive, and geologist. Circle the prefix, suffix, or root that helps you infer each meaning, then write a 2- to 4-word meaning beside each word. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	In noninvasive, what does the prefix non- contribute? Use it and invasive to infer what the tools do not do.	**The tools do not intrude into or disturb the structure.**
2	The prefix a- can mean "not" or "without." What does asymmetrical suggest about the hollow's shape?	**Its shape is not evenly matched or balanced.**
3	Break inconclusive into in- and conclusive. What does the word say about how certain the evidence is?	**The evidence cannot support a firm conclusion.**
4	Greek geo means "earth," and -logist means "a person who studies." Based on these parts, what kind of specialist is a geologist?	**A geologist studies Earth, including its materials and processes.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

A lumiscope is a handheld tool that lets researchers see faint markings in a dark tomb. It joins Latin lumen, meaning "light," to the Greek suffix -scope, meaning "viewing instrument," so its parts explain its purpose.

Accept inferred meanings that accurately use the relevant word parts, even when students use different but equivalent wording. For Part 3, accept plausible invented terms when the identified Greek or Latin element and affix are used accurately and explained in exactly two sentences.