Lines Tell Land

Connect familiar experiences to new map facts.

4.RI.3.A "Use prior (experience) and background (content) knowledge as context for new learning."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline three words or phrases that connect contour maps to something you may already know. Circle one new map fact that each connection helps you understand.

Reading a Landscape Map

1. Have you ever walked up a steep hill and felt your legs work harder? That experience can help you read a topographic map. A topographic map shows the shape and height of land. Instead of drawing a mountain like a picture, it uses curved lines called contour lines. Each contour line connects places that are the same height above sea level.

2. Think about a stack of pancakes. When the pancakes are piled close together, the stack rises quickly. In a similar way, contour lines that are close together show a steep slope. Lines that are farther apart show a gentler slope. Your experience with stairs or ramps can also help, because a steep ramp changes height quickly over a short distance.

3. On a map, contour lines often form closed loops around a hill. The smallest loop is usually near the top. A hiker can use this information before choosing a trail. If a trail crosses many close contour lines, the hiker can expect a hard climb. Knowing how it feels to climb stairs helps the hiker understand why that trail may take more effort.

2 ANSWER WITH EVIDENCE

Use the passage

1. What experience from paragraph 1 can help you understand that a topographic map shows land height? Explain the connection.

2. How does the stack of pancakes help you understand what close contour lines mean?

3. A student sees contour lines that are far apart. Use the passage and what you know about ramps to predict what the land is like there.

4. Why might a hiker expect a hard climb on a trail that crosses many close contour lines? Use an experience from the passage to explain.

3 YOUR TURN

Your own words

Choose a familiar experience that involves moving higher or lower, such as climbing a ladder or going down a slide. In exactly two sentences, name the experience and explain how it could help someone understand one fact about contour lines.

ANSWER KEY

Lines Tell Land

GRADE 4 · 4.RI.3.A

PART 1 · READ AND MARK

Underline three words or phrases that connect contour maps to something you may already know. Circle one new map fact that each connection helps you understand. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What experience from paragraph 1 can help you understand that a topographic map shows land height? Explain the connection.	**Walking up a steep hill can help because the harder climb shows that land can change in height.**
2	How does the stack of pancakes help you understand what close contour lines mean?	**Pancakes piled close together rise quickly, so close contour lines show a steep slope.**
3	A student sees contour lines that are far apart. Use the passage and what you know about ramps to predict what the land is like there.	**The land has a gentler slope, so its height changes more slowly over a distance.**
4	Why might a hiker expect a hard climb on a trail that crosses many close contour lines? Use an experience from the passage to explain.	**Close contour lines show a steep slope. Like climbing steep stairs, the hiker must gain height quickly and use more effort.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

When I climb a ladder, each rung takes me higher. This helps me understand that contour lines show different heights on land.

Accept answers that connect a familiar experience to a correct map fact from the passage. For the open task, accept any accurate two-sentence explanation about height, slopes, or contour-line spacing.