Rock to Sandbar

Track how Earth materials break, move, and settle.

5.8.d "processes such as weathering, erosion, and deposition change the surface of the Earth; and"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline details that show weathering breaking rock, circle details that show erosion moving material, and box details that show deposition settling material.

Changes Along a Creek

1. After a hard rain, Maya visited a creek beside a rocky hill. She noticed tiny cracks in some rocks. Water had entered the cracks, then froze during cold nights. As water froze, it expanded and pushed on the rock. Roots growing in other cracks also pressed the rock apart. These actions broke large rocks into smaller pieces. This breaking is weathering.

2. Later, moving water carried sand, pebbles, and bits of soil downhill into the creek. The flowing creek rubbed the pieces against one another and carried them farther downstream. Wind can move loose sand in dry places, and gravity can pull rock pieces down a slope. The movement of weathered material from one place to another is erosion.

3. Near a bend, the creek slowed as it reached a wide, flat area. It no longer had enough energy to carry all of its sand and pebbles. The material settled on the creek bottom, building a small sandbar. This dropping and settling of moved material is deposition. Over many storms, weathering, erosion, and deposition can reshape the hill and creek.

2 ANSWER WITH EVIDENCE

Use the passage

1. What two actions caused rocks on the hill to break into smaller pieces?

2. How did the creek cause erosion?

3. Why did sand and pebbles settle near the creek bend?

4. Put these processes in the order they happened at the creek: weathering, erosion, deposition. Use one detail from the passage to support your order.

3 YOUR TURN

Your own words

Choose a desert location. In three panels, draw how weathering, erosion, and deposition change the surface there. Label each panel with the process name and write one sentence below each panel describing what happens.

ANSWER KEY

Rock to Sandbar

GRADE 5 · 5.8.d

PART 1 · READ AND MARK

Underline details that show weathering breaking rock, circle details that show erosion moving material, and box details that show deposition settling material. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What two actions caused rocks on the hill to break into smaller pieces?	**Water froze and expanded in cracks, and roots pressed on rocks in cracks.**
2	How did the creek cause erosion?	**The moving creek carried sand, pebbles, and soil downhill and farther downstream.**
3	Why did sand and pebbles settle near the creek bend?	**The creek slowed and did not have enough energy to carry all the material.**
4	Put these processes in the order they happened at the creek: weathering, erosion, deposition. Use one detail from the passage to support your order.	**Weathering happened first as rocks broke into pieces. Erosion moved the pieces in the creek. Deposition happened last when the material settled and built a sandbar.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Panel 1, Weathering: A plant root grows into a crack in a desert boulder and breaks off small rock pieces. Panel 2, Erosion: Wind carries the loose rock pieces across the dry ground. Panel 3, Deposition: Wind slows behind a bush, and the pieces settle into a small pile.

Accept accurate descriptions that distinguish breaking material, moving material, and settling material. For the final task, accept any realistic location and process sequence if each panel is correctly labeled and explained.