Pine Creek Changes

Follow moving water to see how it shapes land.

E.3.9.2 "Construct explanations of how different landforms and surface features result from the location and movement of water on Earth's surface (e.g., watersheds, drainage basins, deltas, or rivers)."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline words that tell how water moves or slows. Circle words that tell how the land changes.

A Trip Down Pine Creek

1. After a hard rain, water runs down a rocky hill near Pine Creek. Tiny streams join into a larger stream. As the water moves downhill, it carries loose soil and small stones. Over many years, this moving water wears away the ground and cuts a valley. Rain that falls on the other side of the hill flows toward a different stream.

2. Farther down, Pine Creek curves around a grassy field. Fast water wears away the outer bank and makes the bend wider. Slower water drops sand along the inner bank, building a low strip of land. After heavy rain, the creek spills over its banks. As the water spreads and slows, it leaves mud on nearby flat land. Many floods add layers to this land.

3. At the end of its trip, Pine Creek flows into a wide lake. The creek slows down when it reaches the still lake water. Sand and mud it carried settle near the creek's mouth, the place where the creek meets the lake. Over time, these layers can build a delta, a piece of new land that sticks out into the lake. Water may flow around parts of the delta.

2 ANSWER WITH EVIDENCE

Use the passage

1. How does moving water make a valley near Pine Creek?

2. Why does the outer bank of the bend change differently from the inner bank?

3. How do floods change the flat land beside Pine Creek?

4. How does a delta form where Pine Creek meets the lake?

3 YOUR TURN

Your own words

Imagine a small stream carrying sand until it runs into a fallen log and slows down. Write two or three sentences explaining where the sand might collect and how this could change the land near the log.

ANSWER KEY

Pine Creek Changes

GRADE 3 · E.3.9.2

PART 1 · READ AND MARK

Underline words that tell how water moves or slows. Circle words that tell how the land changes. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How does moving water make a valley near Pine Creek?	**As water moves downhill, it carries soil and stones and wears away the ground. Over many years, it cuts a valley.**
2	Why does the outer bank of the bend change differently from the inner bank?	**Fast water wears away the outer bank, making the bend wider. Slower water drops sand along the inner bank, building a low strip of land.**
3	How do floods change the flat land beside Pine Creek?	**Floodwater spreads and slows on the flat land, leaving mud behind. Many floods add layers of mud.**
4	How does a delta form where Pine Creek meets the lake?	**The creek slows when it reaches the lake, so sand and mud settle near its mouth. The layers build new land.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Some sand might settle on the side where the water first hits the log. Over time, the sand could build a small mound there.

Accept answers that connect a change in the water's speed or path to land being worn away or sediment being left behind. For Part 3, accept another location near the log if the explanation makes sense.