After the Rain

Use coordinates and image descriptions to study a flooded area.

5.SS.2.4 "Read, analyze, and interpret maps, including the use of latitude and longitude aerial photography, satellite images, and other geospatial products."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline each place and its coordinates. Circle the rules for comparing latitude and longitude, then number the descriptions of the two satellite images in time order.

A Town Checks Its Routes

1. After a hard rain, a town team studies its river area without walking every road. A map gives places by latitude and longitude. Larger north latitude numbers are farther north. All these places lie west of zero longitude, so a smaller west longitude number lies farther east. The library is at 30.10° N, 90.20° W. The footbridge is at 30.11° N, 90.20° W.

2. The team compares satellite images taken before and after the rain. The earlier image shows a narrow river and dry fields beside it. The later image shows river water spread across those fields. A satellite image covers a wide area, so the team can spot where flooding has spread. It cannot show every small obstacle on a walking path.

3. A recent aerial photograph, taken from a plane, shows the area near the footbridge in more detail. A fallen tree lies across the path just south of the bridge, but the bridge itself is clear. The town shelter is at 30.10° N, 90.19° W. The team must decide which nearby paths people can use to reach the shelter safely.

2 ANSWER WITH EVIDENCE

Use the passage

1. Is the footbridge north or south of the library? Use their coordinates to explain.

2. Is the shelter east or west of the library? Use their coordinates to explain.

3. What change can the team find by comparing the two satellite images?

4. Which kind of image helps the team find a small obstacle near the footbridge, and what obstacle does it show?

3 YOUR TURN

Your own words

Imagine a supply station is added south and west of the library. Write three sentences that give possible coordinates for it, explain how the numbers show its location, and name the kind of image that would best reveal a fallen branch on a nearby path.

ANSWER KEY

After the Rain

GRADE 5 · 5.SS.2.4

PART 1 · READ AND MARK

Underline each place and its coordinates. Circle the rules for comparing latitude and longitude, then number the descriptions of the two satellite images in time order. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Is the footbridge north or south of the library? Use their coordinates to explain.	**The footbridge is north of the library because 30.11° N is greater than 30.10° N.**
2	Is the shelter east or west of the library? Use their coordinates to explain.	**The shelter is east of the library. Both are at 30.10° N, and 90.19° W is farther east than 90.20° W.**
3	What change can the team find by comparing the two satellite images?	**The river spread into fields that were dry before the rain.**
4	Which kind of image helps the team find a small obstacle near the footbridge, and what obstacle does it show?	**The aerial photograph shows a fallen tree across the path just south of the footbridge.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

The supply station could be at 30.09° N, 90.21° W. Its north latitude is smaller than the library's, and its west longitude is larger, so it lies south and west. A recent aerial photograph would best show a fallen branch on a nearby path.

For the supply station, accept any north latitude below 30.10° N and west longitude above 90.20° W, with an accurate explanation. The student should choose a recent aerial photograph for the small obstacle.