Coordinates for the Crew

Use latitude and longitude to find supply stops.

6-9.WG.2.1 "Apply latitude and longitude to locate places on Earth."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline each supply stop's name and circle its coordinate pair. Beside each circled pair, write its two hemisphere letters, such as N and W.

A Rescue Crew's Supply Stops

1. A rescue crew receives a radio message: "We are at 20°N, 30°W." That pair of numbers does more than name a region. Latitude tells how far north or south a place lies from the equator, which is 0° latitude. Longitude tells how far east or west it lies from the prime meridian, which is 0° longitude. Read latitude first and longitude second. The letters matter: a north latitude and a south latitude can have the same number but point to opposite sides of Earth.

2. The crew keeps a list of supply stops around the world. Reykjavík, Iceland, is near 64°N, 22°W. Lima, Peru, is near 12°S, 77°W. Nairobi, Kenya, is near 1°S, 37°E. Singapore is near 1°N, 104°E. Sydney, Australia, is near 34°S, 151°E. These coordinates are rounded to whole degrees, so they describe nearby locations rather than exact street addresses. A dispatcher reads the latitude and longitude together before choosing a stop; either number alone could lead the crew to the wrong place.

3. Now the crew gets a second message: a package needs to go to a stop south of the equator and east of the prime meridian. The crew cannot choose a destination by checking latitude alone. It must check both directions in the coordinate pair. A stop at 1°N is as far from the equator as a stop at 1°S, but those stops lie on opposite sides of it. When the crew compares places, the degree number shows distance from a starting line, while the letter shows direction.

2 ANSWER WITH EVIDENCE

Use the passage

1. The dispatcher receives the pair 1°S, 37°E. Which supply stop matches it?

2. Which supply stop is in the Northern and Western Hemispheres? Give its coordinate pair.

3. Which two stops are about 1° from the equator on opposite sides of it? Give each stop's longitude to show that they are not at the same place.

4. Sydney and one other stop are both south of the equator but on opposite sides of the prime meridian. Which stop is it? Give its coordinate pair.

3 YOUR TURN

Your own words

Invent two new supply stops with coordinate pairs that do not appear in the passage. Put one north of the equator and east of the prime meridian, and the other south of the equator and west of the prime meridian. Write one sentence for each stop that gives its pair and names its two hemispheres.

ANSWER KEY

Coordinates for the Crew

GRADES 6-9 · 6-9.WG.2.1

PART 1 · READ AND MARK

Underline each supply stop's name and circle its coordinate pair. Beside each circled pair, write its two hemisphere letters, such as N and W. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	The dispatcher receives the pair 1°S, 37°E. Which supply stop matches it?	**Nairobi, Kenya.**
2	Which supply stop is in the Northern and Western Hemispheres? Give its coordinate pair.	**Reykjavík, Iceland, near 64°N, 22°W.**
3	Which two stops are about 1° from the equator on opposite sides of it? Give each stop's longitude to show that they are not at the same place.	**Nairobi is at 1°S, 37°E; Singapore is at 1°N, 104°E. Their longitudes differ.**
4	Sydney and one other stop are both south of the equator but on opposite sides of the prime meridian. Which stop is it? Give its coordinate pair.	**Lima, Peru, near 12°S, 77°W.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Stop A is at 25°N, 60°E, so it is in the Northern and Eastern Hemispheres. Stop B is at 18°S, 42°W, so it is in the Southern and Western Hemispheres.

For the marking job, accept N and W for Reykjavík, S and W for Lima, S and E for Nairobi, N and E for Singapore, and S and E for Sydney. For Your Turn, accept any two new, valid coordinate pairs with the requested directions and matching hemisphere names.