

Name _____

Date _____

Latitude & Longitude

Use the text to answer each question below.

1. Relative location is the position of a place compared to another place. You can use it to describe what something is next to or near. For example, you could say that Yemen is a country east of the Red Sea. But what if you don't know where the Red Sea is either? Absolute location is the exact position of a place on Earth. To describe it, you can use coordinates of latitude and longitude. For example, Spanish Town, Jamaica, is located at 18°N, 77°W. Anyone can use a map to find that exact spot on the globe.

What does the sentence "Saudi Arabia is north of Yemen" describe?

- A. The latitude of Saudi Arabia and Yemen B. The longitude of Saudi Arabia and Yemen
C. Saudi Arabia's relative location D. Saudi Arabia's absolute location
2. Latitude lines run east to west around the globe. You can remember it this way: **Latitude** lines are **flat**! Latitude lines run east to west, but they actually give us a location that is a certain number of degrees north or south of the Equator. The symbol for "degree" is °. If you were 50 degrees north of the Equator, your latitude would be 50° N.

Longitude lines run north and south around the globe, tapering toward the North and South Poles. Longitude measures how far east or west a place is from the Prime Meridian.

Which of the following describes a line of latitude?

- A. 30° W B. 90° S
C. 40° E D. All of the above
3. A hemisphere is a half of the globe. The Equator splits the globe into the Northern and Southern Hemispheres. The Prime Meridian splits the globe into the Eastern and Western Hemispheres.

Even without a map, latitude and longitude tell us the hemispheres in which a place is located. For example, Foso, Lesotho, is located at 29.2° S, 27.3° E. This tells us it is south of the equator (latitude) and east of the Prime Meridian (longitude). We know from these coordinates that it's in the Southern and Eastern Hemispheres.

Which of these coordinates describes a place in the Northern and Western Hemispheres?

- A. 10° N, 18° W B. 29.2° S, 27.3° E
C. 30° N, 45° E D. 2° N, 1° E

4. The degrees of latitude and longitude are actually pretty far apart. When we round latitude and longitude to the nearest degrees, we might actually be naming something that's close to where we are, but not our exact point.

Sometimes to be more precise, we use decimals. If we want to keep to whole numbers, another way to be more precise is to measure with a smaller unit than a degree: a minute. There are 60 minutes in each degree. We show minutes with this little dash: '.

We can get even more specific than minutes by using an even smaller measurement called seconds. There are 60 seconds in each minute. We show seconds with this double dash: ''.

If we needed to give very exact coordinates, we could say: $3^{\circ} 9' 36''$ S, $60^{\circ} 1' 48''$ W. We could use decimals to describe this same location as 3.13° S, 60.03° W.

Which of the following describes the most precise absolute location?

- | | |
|---|--|
| A. 10° S, 15° E | B. $10^{\circ} 20'$ S, $15^{\circ} 25'$ E |
| C. $10^{\circ} 20' 45''$ S, $15^{\circ} 25' 45''$ E | D. South of the Equator and east of the Prime Meridian |