

## Longitude and Latitude

Absolute Location

"Man this rainforest is so big and there are no street signs anywhere. Who's going to be able to find me? I know..."

(Phone rings...) Hello? "I'm lost could you find me please?" Where are you? "I'm in the Amazon, near the big trees." OK, keep calm, have patience, You just gave me your relative location. That's means in relation to another place, For example, the trees in this case. A relative location can be a good start, With travel time, distance, direction or a landmark. But it won't help me to find you there, I mean, think about it, there are trees everywhere. What I need is some more information, Yeah, I need your absolute location. So I can know exactly where you're at. "That's impossible. How do I give you that? And I don't know how long I can last, There's poisonous frogs, anacondas and bats." Relax, I just need you exact position on Earth, It's universal to everyone, it has to work. We describe it with coordinates of latitude and longitude, It won't be long my dude. See the globe is covered with a grid of lines, They can be of great help when there's something to find. "Lines? All I see are animals that are scary." The lines aren't visible, they're imaginary.

I see the equator, where you at my dude? Lines east to west, that's latitude, Lines north to south, that's longitude. I don't know what you've been told, But line of latitude run east to west around the globe. They're measured in degrees, you need that knowledge. "Degrees like temperature? Or what you get in college?" No, like angles, check out the symbol, It's a little circle, really pretty simple. The equator is the 0 degree line of latitude, "I'm about 3 degrees south, now you have a clue!" The degrees increase as you move away, To the north or the south, where the penguins stay. The North Pole's at 90 degrees north, The South Pole is at 90 degrees south of course. "OK, so where are you at, why are you waiting?" Well, latitude is only half of the equation. 3 degrees south could be Kenya or Brazil, So I need the longitude to seal the deal. Longitude lines run north to south, Also known as degrees or meridians, hey. The Prime Meridian's the 0 degree line of longitude That runs through Greenwich, UK. It divides the Earth into two more hemispheres, The eastern and western, listen here. Each go up to 180 degrees, "I'm at 60 degrees west, save me please!"

I see the equator, where you at my dude? Lines east to west, that's latitude, Lines north to south, that's longitude. I'mma find you on the grid, hold on my dude. x2

"So the coordinates give you the place, where the two lines meet, at one point in space. 3 degrees south, 60 degrees west, You have my coordinates, so put them to the test."

2

now would be a good time to come through."