



# GEOGRAPHY AWARENESS WEEK 2019

## BIRTHDATE COORDINATES CHALLENGE

Google Maps doesn't just have the ability to search for names of places but also their GPS (Global Positioning Systems) coordinates by longitude and latitude. Longitude is the distance running east to west of the prime meridian located at Greenwich, England. Latitude is the distance running from north to south of the equator.

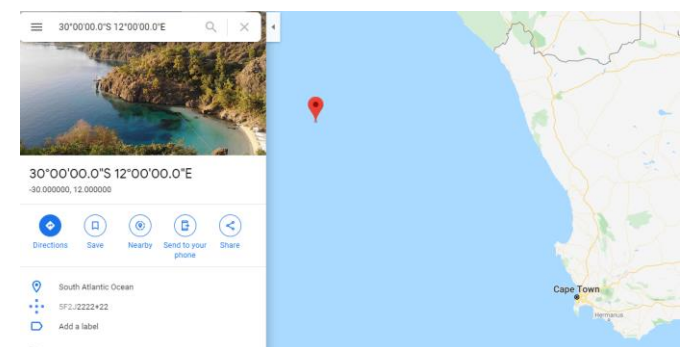
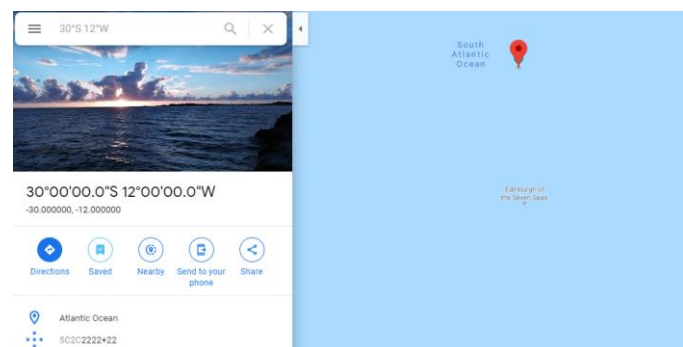
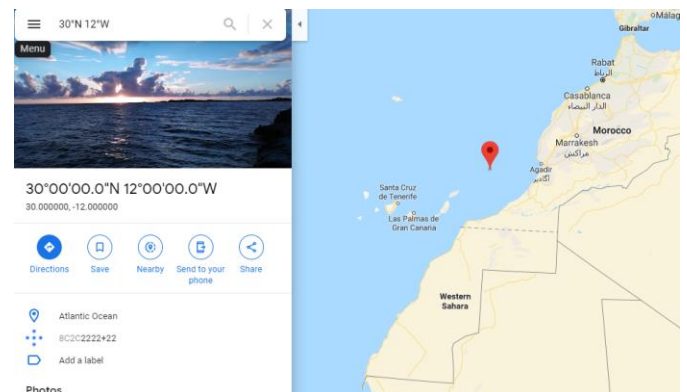
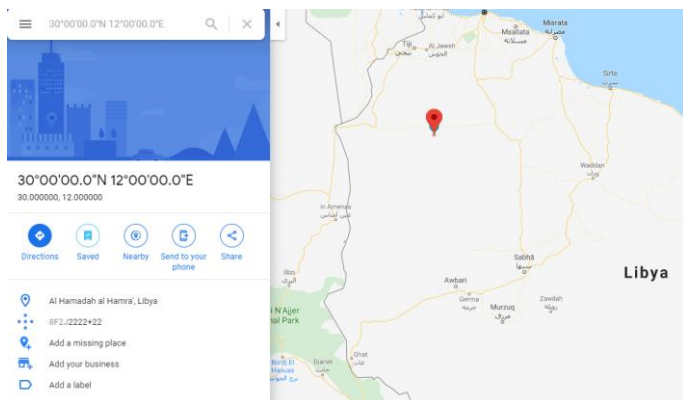
We discovered when birthdates are plugged into a Map as longitudes and latitude coordinates, all kinds of interesting places can be discovered. The fun in this activity utilizes the month and day of your birth to create four unique longitudinal and latitudinal locations. Using the day of birth as the longitudinal coordinate, and month of birth as the latitudinal coordinate results in a fun mapping activity.

### An example of this is a birthday that falls on December 30<sup>th</sup>.

Using the day of birth (30) we set 30 degrees as the longitudinal coordinate, and then using the month of birth (12) we set 12 degrees as the latitudinal coordinate, thus creating the following coordinates:

- 30° N and 12° E [entered as 30 N 12 E]
- 30° S and 12° W [entered as 30 S 12 W]
- 30°N and 12°W [entered as 30 N 12 W]
- 30 ° S and 12° E [entered as 30 S 12 E]

When those coordinates are plugged into Google Maps we find the following locations:



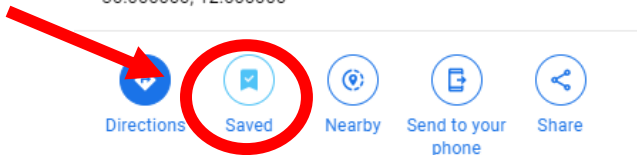
## Want to create maps with your own birthday? Here's how:

1. Go to Google Maps, <https://maps.google.com>
2. In the search bar of Google Maps type in your day date of birth followed by either N or S then the numerical code for your month of birth followed by either E or W. Do this for each set of cardinal directions to generate 4 map locations.

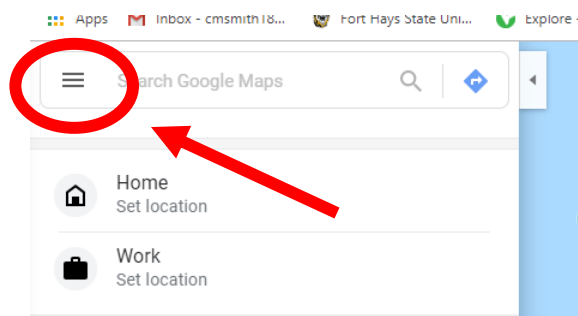
Hint: See example

- As you plug the coordinates into Google Maps, make sure to save each of your coordinate sets!

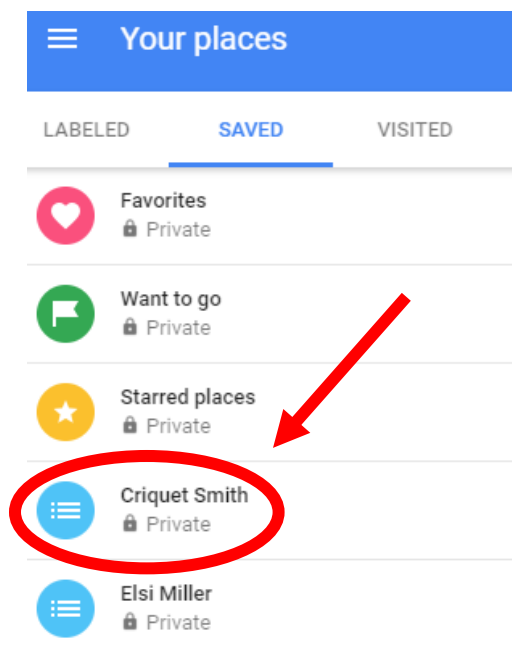
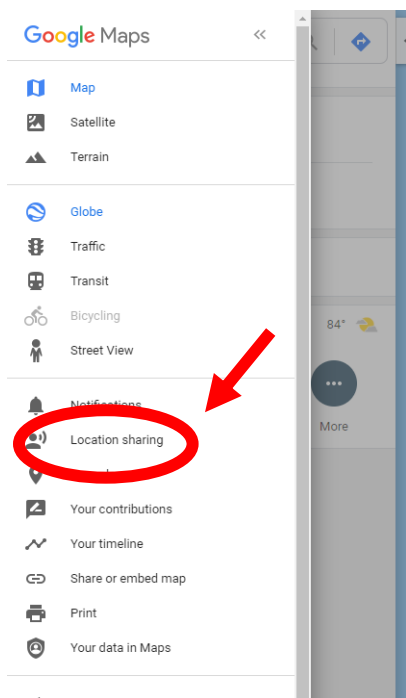
30°00'00.0"S 12°00'00.0"E  
-30.000000, 12.000000



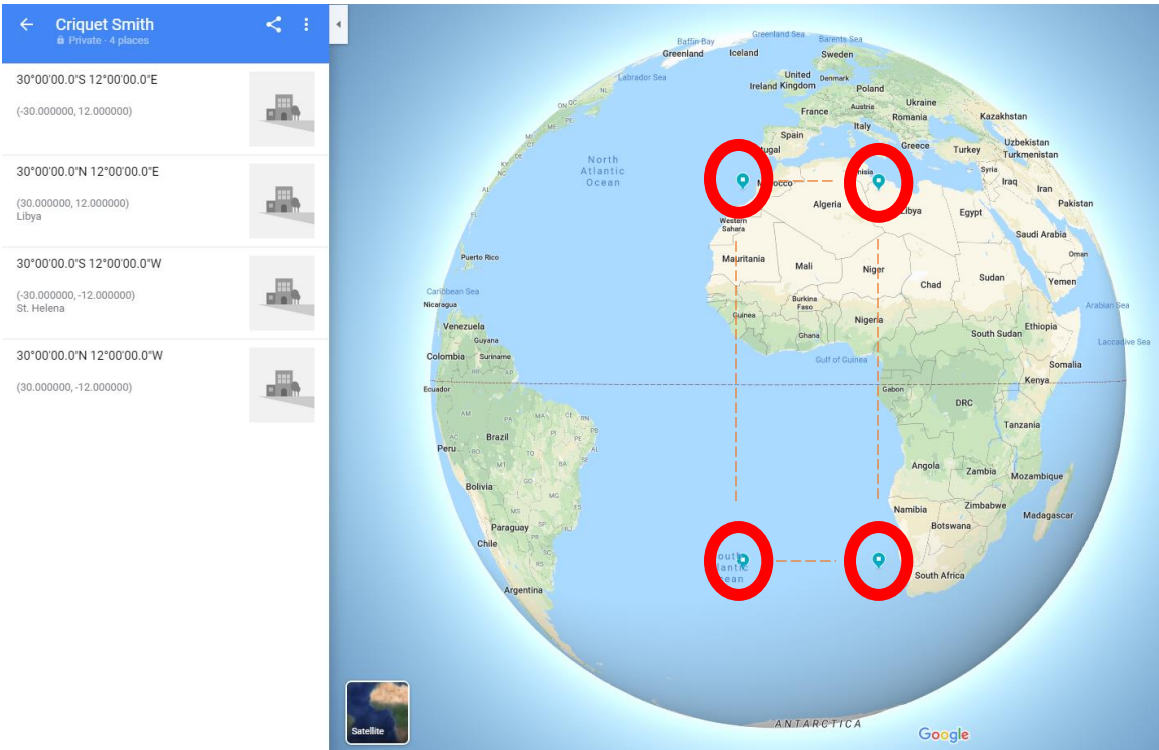
- On the first one you save, create a 'New List' to save all of your coordinate sets in
- Once you have all four coordinate sets created and saved to your list, click the Menu button located at the top of the Google Maps search Bar



- Scroll down and select "Your places", once the "Your places" tab is open, select the 'Saved' tab and then select the list you created



- Once the list you created is open and you see all 4 of your coordinates, zoom out on the map. You can zoom out by using the scroll button on your mouse or by hitting the ‘-’ button on the bottom right of the screen. Once the Map is zoomed out you should be able to see how large of a space is encompassed by the coordinates you created.
- If you were to draw a line between each of your four coordinates, you should get a geographic region with a quadrilateral geometric shape.



3. What do you see within your coordinate created geographic region?  
We encourage you to zoom in and around the region, you may find some very interesting things!  
We also encourage you to play with overlaying a satellite image of your region, you can do this by selecting the small square ‘satellite’ button in the bottom left of the screen.
  - Take it a step further – try this using the last two digits of your birth year and your birth month as longitude and latitude. Note: this may give you a very large area and you may need to ‘spin’ the globe to find all sets of your coordinates.
4. For even more fun we challenge you to take a screen shot/picture of your coordinate created geographic region and submit it to us via a web form on the GAW Events page <https://fhsu.edu/geo/events/GAW/index.html> to be entered into a drawing for prizes.

## PRIZES!!!!

- Individual Submissions will be entered into a drawing for a few small fun prizes.
- Kansas Geographic Alliance is sponsoring a classroom treat prize for teachers and students who submit an class entry too!