Topic: Maps and Geographic Skills
Grade Level: 8th grade
Class: Social Studies

Prerequisites: Student knowledge of relative and absolute locations and ability to interpret a map based on legend and other filters/layers.

Common Core State Standard Overview: #3 Geography: Students develop spatial understanding through the study of location, distance, direction, pattern, shape, and arrangement.

- **Narrowed Standard:** 8.3.3

Apply knowledge of geography skills and terms to:
• plot latitude and longitudinal coordinates
• read and interpret a map

ISTE Student Standard Overview: 1.5 Computational Thinker- Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.

- **Narrowed Standard:** 1.5b

Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.

- **Objective(s):** The learner will be able to predict the next coordinates of a given sequence based on patterns, prior knowledge of maps, and the plotting of longitude and latitude coordinates.

Pacing: Contingent upon depth and length of assessment piece as well as number of activities included outside of this learning design

- **Authentic Assessment:**
  Performance Goal: Students gather data, examine patterns, and apply information for decision-making using digital tools and resources.

Students will be provided a realistic scenario in which they must use their knowledge of plotting coordinates, relative and absolute location, and map-reading skills to then predict the next location within the pattern of coordinates.
They will do so by plotting the coordinates of the given sequence, as well as having to use digital map tools to view different types of maps (i.e. street, terrain, water, satellite, etc.) in order to narrow the person's location from a relative point, to an absolute location or coordinate. Students will have to determine what tools they plan to use (teacher may provide options), determine a strategy or steps to solve their problem, and then provide their reasoning behind their predicted coordinates via a short multimedia presentation. The presentation will serve as the artifact to be graded/assessed via the rubric.

Presentation should include: visual aids (maps they used, coordinates they plotted), explanation of how to plot coordinates, explanation of steps they followed to reach their prediction (using key terms: coordinates, longitude, latitude, relative location, absolute location, map layer (the name or type of map).

Rubric for Assessment Piece

Sample Assessment Scenario

Activities Scaffolded to Support Assessment and Objective Mastery:

Interactive instruction and practice simulations, as well as discussion.
Check out this awesome example!

Technology Recommendations for Lesson:
-Interactive lesson that includes identifying, labeling, and drawing coordinates (Nearpod and Pearddeck are my favorites)

-Flocabulary incorporated into lesson
- Physical Globe and/or poster map for referencing in class
- Digital Maps- Top recommended to fit assessment: National Geographic-Mapmaker Interactive, Scribble Maps , Maps.co, Google Maps
- Presentation- recommended platforms: Zee Maps, Flipgrid