### Fun with Longitude and Latitude

**Created by:** Angela Groene  
**School and District not available**

<table>
<thead>
<tr>
<th>Grade Level (Req.): 5th grade</th>
<th>Content Area (Req.): Geography</th>
<th>Unit (Opt.):</th>
</tr>
</thead>
</table>

#### Connections to Other Disciplines (Opt.):
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#### Time Frame (Req.): 45 minutes

**Goal (Req.):** To help students strengthen their skills in plotting points on a map using longitude and latitude in two different activities.

**Objective (Req.):** Students will be able to use longitude and latitude to locate points on a map.

#### Materials Needed (Req.):
- Dry erase markers
- Laminated desk maps
- Designated points to plots (on Smartboard or overhead projector)
- Transparency/picture of a world map that includes the numbered latitude and longitude lines to display to the class
- Overhead projector, LCD projector and/or Smartboard
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#### New Vocabulary (Opt.):
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#### Anticipatory Set/Introduction [Inquiry Question is required] (Req.): How do people locate places around the world quickly?

#### Instructional Sequence/Procedure (Req.):

1. **1st Activity:** (students can work in groups if not enough maps) Have students plot the following points: 1) 50°N, 60°W; 2) 20°N, 120°W; 3) 20°S, 80°W; 4) 40°S, 20°W; 5) 40°S, 20°E; 6) 20°S, 80°E; 7) 20°N, 120°E; 8) 50°N, 60°E. (see Assessment for completion of activity)

2. **2nd Activity:** Obtain a transparency or picture of a world map that includes the numbered latitude and longitude lines. Explain to the students that the game is similar to tic-tac-toe except that a team must have five Xs and Os in a row to win a round. To play, divide the class into two teams. The first player from Team X names a set of coordinates such as “20 degrees north and 60 degrees west.” The teacher writes an X on the location where those two lines intersect. Then a player from Team O takes a turn. If a player names a set of coordinates that has already been used, his team loses a turn. A team wins the round when it has five marks in a straight line on the map. Students will want to block the other team’s moves.

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<tr>
<th>Formative Evaluation (Req.): Activity #2 is a formative assessment that requires teacher observation.</th>
<th>Assessment (Req.): When completed with Activity #1, they should have created a smiley face! (Easy to check!)</th>
</tr>
</thead>
</table>
| Iowa Core Curriculum Standards Used (Req.):  
  • Geography, grade 3-5: Understand the use of geographic tools to locate and analyze information about people, places, and environments. |  |
| Common Core Curriculum Standards Used (Opt.): |  |
| NGS Standards Used (Req.):  
  • How to analyze the spatial organization of people, places, and environments on the Earth’s surface  
  • The physical and human characteristics of places  
  • That people create regions to interpret Earth’s complexity |  |
| Five Themes of Geography Used (Req.):  
  • Location | School District Standards and Benchmarks (Opt.):  
  • |
| 21st Century Universal Constructs (Opt.): |  
| Other Disciplinary Standards (Opt.): | •  
|  | •  
|  | •  
|  | •  
| Other Essential Information (Opt.): |  
| Other Resources (Opt.): | •  
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