THE GRID GAME

RECOMMENDED GRADES: 4-8
TIME NEEDED: 30-45 MINUTES

Description
Students work in teams to apply latitude and longitude coordinates, find locations on the map, and mark them. If correct, they get a special bonus question about a place nearby. The team with the most points wins!

Learning Objectives
Students will:
• describe the concept of absolute location using latitude and longitude
• simulate the global grid of latitude and longitude lines using colored chains to locate sets of coordinates

Materials
• Coordinate Cards: South America (16, four for each team)
• Colored chain or rope, (8 total: 46 inches long each; two per team)
• Colored lanyards (40 total, 10 of each: red, yellow, green, and blue) (optional)

Preparation
5 minutes
• Place two chains per team near the colored circle in each corner.
• Place the Grid Game Coordinate Cards (numbered one through four) facedown on each team’s circle.

Tips/Modifications
Modification
• Substitute the chain for rope of any color. If no rope is available, modify the activity so students walk along lines of latitude and longitude until they meet.

Rules
Have students remove shoes before walking on the map.
DIRECTIONS

1. Review the concepts of latitude and longitude with students before starting the game by showing them where they will find the numbers associated with each set of coordinates. Ask students to describe latitude and longitude. They should recognize that latitude numbers can generally be found along the sides of the map (east and west), while longitude numbers can be found [bunched] at the top [north] or along the bottom [south]. Have a few students walk along each set of lines to show their locations and demonstrate how the lines curve or slowly get closer or farther apart.

2. Divide the class into four teams—red, yellow, green, and blue—and instruct each team to line up behind their “Base Camp” [the colored circles in the corners of the map]. Make the teams as even as possible.

Optional
Give each student a lanyard corresponding to the color of his or her team.

3. Explain that four students at a time from each team will work together as a group to locate the coordinates on their card and place their chains, or rope, on the correct lines of latitude and longitude, forming a + sign with the two chains along the intersection of the two lines. Give students a set time [30 seconds or one minute] to locate their coordinates and place their chains. Ask the group to wait at that spot for you to check their location. No running is allowed. Students who run, touch, or impede other students will be disqualified.

4. Start each round of the game by telling the four teams of four students to pick up their chains and the top card on their pile before going out on the map to locate their coordinates. Have students then wait at that spot for you to check their location and to ask their team a bonus question.

5. There will be a total of eight points available to each team. One point will be awarded if the team marks the correct location. A second point will be awarded if the team is able to answer a bonus question [below] about a physical feature or place near their coordinates. A group is only asked a bonus question if they first got the location right. The group returns to their Base Camp with their chains and card and the next group from their team takes a turn. The team with the most points at the end of the fourth round is the winner.

ROUND ONE QUESTIONS AND ANSWERS

- **Red Card 1:** Which Brazilian city northeast of your coordinates hosted the 2016 Summer Olympic Games? [Rio de Janeiro]
- **Yellow Card 1:** What large city is located near the confluence of the Amazon and Napo Rivers? [Iquitos, Peru]
- **Green Card 1:** Name the capital city nearest to your coordinates. [Santiago, Chile]
- **Blue Card 1:** The mouth of what river lies near your coordinates? [Amazon]
ROUND TWO QUESTIONS AND ANSWERS

- **Red Card 2:** Name the famous island group at the heart of your coordinates. [Galápagos Islands]
- **Yellow Card 2:** Which European nation administers the Falkland Islands? [United Kingdom]
- **Green Card 2:** Name the capital city southeast of your coordinates. [Brasília, Brazil]
- **Blue Card 2:** Which large lake is southeast of your coordinates? [Lake Titicaca]

ROUND THREE QUESTIONS AND ANSWERS

- **Red Card 3:** What is the southernmost point of South America called? [Cape Horn]
- **Yellow Card 3:** Name the capital city just west of your coordinates. [Caracas, Venezuela]
- **Green Card 3:** What wetland region lies northwest of your coordinates? [The Pantanal]
- **Blue Card 3:** Name the capital city nearest to your coordinates. [Bogotá, Colombia]

ROUND FOUR QUESTIONS AND ANSWERS

- **Red Card 4:** Name the large coastal city due north of your coordinates that starts with an R. [Recife, Brazil]
- **Yellow Card 4:** Name the capital closest to your coordinates. [Montevideo, Uruguay]
- **Green Card 4:** Name the major city on the Rio Negro due north of your coordinates. [Manaus, Brazil]
- **Blue Card 4:** What large city lies on the Strait of Magellan? [Punta Arenas, Chile]