NATIONAL GEOGRAPHIC

RESOURCE LIBRARY I ACTIVITY : 50 MINS

Map That Game Board

Students identify human developments in one of six geographic areas in the United States. Students use Google Earth to research the area, identify potential human barriers to migration in that region, and create a map to visualize their research that becomes their game board.

GRADES

6, 7, 8

SUBJECTS

Geography, Social Studies

CONTENTS

1 Resource, 3 PDFs

OVERVIEW

Students identify human developments in one of six geographic areas in the United States. Students use Google Earth to research the area, identify potential human barriers to migration in that region, and create a map to visualize their research that becomes their game board.

For the complete activity with media resources, visit:

http://www.nationalgeographic.org/activity/map-game-board/

In collaboration with

educuri:us
learning that connects

DIRECTIONS

**Interrupted Migrations** Unit Driving Question: _How can human activities help or hinder animal migrations?_

**Mapping Human Interruptions to Migration** Unit Driving Question: _How has human activity changed the environment?_

1. Introduce mapping techniques to students.
- In this activity, students create maps of their geographic areas that will become their game boards. To introduce mapping techniques, show students the _North American Species Migration Map_.
- Have students discuss the map in their groups by answering the following questions:

  - _What features stand out to you on this map?_
  - _Why are those features important?_
  - _Think about your geographic area. What important features would you want to include on your maps?_

2. Prepare groups to use MapMaker Kits to create boards for their games.
- Provide each group with the printed pages from the _United States Tabletop Map Part 1_ and the _United States Tabletop Map Part 2_ from the _United States MapMaker Kit_. Have students use the printed PDFs (there are 16 pieces total) to create their tabletop map.
- Have students use _Google Maps_ or an atlas to locate their focal geographic area on their region map and draw a bright border around it on their tabletop map.
- Then, have groups use their _Geographic Area Information Sheets_ and summary paragraphs from the _Geography Matters_ activity to add additional features to their maps. Each map should include:

  - A border for their geographic focus area
  - A key
  - Cardinal points
  - Political boundaries labeled
  - Major cities labeled
  - Watershed and waterways (if applicable) labeled

- Next, have groups use their completed *Human Impact Cards (Set 1 and Set 2)* and *Google Earth* to visually explore their focus area more closely. In their groups, have students complete the following on their map:

  - Identify at least five human activities that could threaten animal migration.
  - Mark each human activity site on their map and include a brief description of the activity and its impact.

3. Guide groups through informal peer assessment of their maps.

- Once the maps are complete, have each group use the *Initial Game Board Design Checklist* to ensure they have all the required elements.
- Then, have groups pair up and use the same checklist to give informal feedback on another group's map.

4. Revisit the Know and Need to Know chart.

- As a class, revisit the Know and Need to Know chart started in the *Intersecting Actions* activity. Read through the Need to Knows and put a checkmark next to the points that students have learned throughout this first lesson.
- Elicit any new Need to Knows that have surfaced for students. Guide students to think about what they will need to know in order to be successful in completing their unit project. Add these new ideas to the chart.

Modification

Step 2: An alternative to the printed tabletop kits is for students to use an online map-making tool like National Geographic's *MapMaker Interactive.*

Modification

Step 2: If internet access is not available, print an aerial Google Earth view of each region for the students. Ensure the Google Earth map shows names and markers of sites when printed.

Tip

Step 3: If this is the first time students have given peer feedback, use a feedback protocol with sentence stems to scaffold their discussion and support useful feedback.

Informal Assessment

Initial Game Board Design Checklist: Use the checklist to assess whether groups have included the specified geographic information and whether their map demonstrates an understanding of each component.

OBJECTIVES

Subjects & Disciplines

Geography
Social Studies

Learning Objectives

Students will:

- Locate and identify human impacts on a particular geographic area of the United States.
- Create a map of key geographic features and human developments in a particular area of the United States.

Teaching Approach

- Project-based learning

Teaching Methods

- Hands-on learning
- Research
- Self-directed learning

Skills Summary

This activity targets the following skills:

- Critical Thinking Skills
  - Analyzing
  - Applying
  - Creating
  - Remembering
  - Understanding
- Geographic Skills
  - [Acquiring Geographic Information](#)
  - [Analyzing Geographic Information](#)
  - [Answering Geographic Questions](#)
  - [Asking Geographic Questions](#)
  - [Organizing Geographic Information](#)

National Standards, Principles, and Practices

COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS & LITERACY

• **[CCSS.ELA-LITERACY.RH.6-8.7:](#)**
Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.

THE COLLEGE, CAREER & CIVIC LIFE (C3) FRAMEWORK FOR SOCIAL STUDIES STATE STANDARDS

• **[D2.Geo.1.6-8.:](#)**
Construct maps to represent and explain the spatial patterns of cultural and environmental characteristics.

Preparation

What You'll Need

MATERIALS YOU PROVIDE

- Colored pencils
- Markers
- Sticky notes

REQUIRED TECHNOLOGY

- Internet Access: Required
- Tech Setup: 1 computer per pair

PHYSICAL SPACE

- Classroom

GROUPING

- Large-group instruction
- Small-group work

RESOURCES PROVIDED: HANDOUTS & WORKSHEETS

- Initial Game Board Design Checklist
- United States Tabletop Map Part 2
- United States Tabletop Map Part 1

RESOURCES PROVIDED: MAPS

- United States Physical MapMaker Kit

BACKGROUND & VOCABULARY

Background Information

As a field of study, regional geography is focused on what is unique about the social and environmental relationships that occur in specific locations. Conservationists map migratory paths in particular regions and can sometimes learn about global migration patterns by focusing on those that occur regionally. By studying animal migration in various regions it is possible to see how and why animals might move across or between regions during their migratory journeys. Some conservationists focus, in particular, on how human impacts in a region may negatively impact animal migration.

Prior Knowledge

Recommended Prior Activities

-
-

Vocabulary

Term	Part of Speech	Definition
border	*noun*	natural or artificial line separating two pieces of land.
cardinal direction	*noun*	one of the four main points of a compass: north, east, south, west.
key	*noun*	an explanation of symbols and abbreviations used on a map, also known as a legend.
map	*noun*	symbolic representation of selected characteristics of a place, usually drawn on a flat surface.
mapping	*noun*	making and using maps.
map symbol	*noun*	representation of one piece of data displayed as part of a larger representation of spatial information.
political boundary	*noun*	imaginary line separating one political unit, such as a country or state, from another.
region	*noun*	any area on Earth with one or more common characteristics. Regions are the basic units of geography.
regional geography	*noun*	branch of geography devoted to the study of characteristics of a specific region.
watershed	*noun*	entire river system or an area drained by a river and its tributaries.
waterway	*noun*	body of water that serves as a route for transportation.

NATIONAL GEOGRAPHIC