

RESOURCE LIBRARY
ACTIVITY : 45 MINS

Using a Grid With a Zoo Map

Students use a map grid to describe and find locations on a zoo map and a city map. They use a grid to create a message.

GRADES

2, 3

SUBJECTS

Geography

CONTENTS

2 Images, 2 PDFs

OVERVIEW

Students use a map grid to describe and find locations on a zoo map and a city map. They use a grid to create a message.

For the complete activity with media resources, visit:

<http://www.nationalgeographic.org/activity/using-grid-zoo-map/>

DIRECTIONS

1. Activate students' prior knowledge about visiting and finding places at a zoo.

Invite volunteers to share about any visit to a zoo they have made. Ask: *How did you find your way around? What animals did you see?* Explain that students will be using a zoo map from a famous zoo in Chicago, Illinois—the Lincoln Park Zoo.

2. Show the grid on the map of Lincoln Park Zoo.

Project the map of the Lincoln Park Zoo, making sure that all students can view the details on the map. Ask volunteers to name some of the animals they might see in this zoo. Ask: *How can you find the bears?* Explain that instead of reading all of the words on the map, you can use the grid. The grid helps you locate places on a map. Maps with grids have clues, and the clue for the bears is A3. Move your finger or a pointer along the lines on the map, and explain that lines on the map run across and down to form a pattern of squares. This is the grid. On this map, the squares from top to bottom are letters. Across the map from left to right are numbers.

Explain that each square has a number and a letter. Find the letter A at the side of the map. Now find the number 1 at the top of the map. Ask: *What do you think the clue is for this square?* (A1) Model for students that to find square A3 on the grid, you put your finger on the letter A. Then move your finger across to the number 3. The bears are in A3.

3. Practice using the grid to name and find places in the zoo.

Practice these steps several times. Ask students to find D2 on the map. Ask: *What birds are in that part of the zoo?* (penguins) Have them find D3 and name the animals there. (monkeys) Ask: *In what square are the lions?* (C3)

Point out that more than one thing can appear in a grid square. Have them find a square with two places of interest in it. Have them name it, and have another student name the clue for it.

4. Have students find and describe locations using a Chicago map.

Give students copies of the Chicago map. Tell students that Chicago is a big city in the state of Illinois. Ask for a volunteer to point out square B5. Ask: *What body of water do you see there?* (Lake Michigan) Talk about how the map shows much of Chicago along this lake. Ask students to name other squares that include parts of the lake. (A4, B4, A5, C5, D5) Ask students to raise their hand when they can name the grid location of the Lincoln Park Zoo on this map. (B4) Give students time to find it, and wait for many hands to be raised to reinforce that it's not a race.

Ask students to find Addison Street, and name all of the squares where this street passes. (A1, A2, A3, A4)

5. Have students create a quiz.

Working in pairs or groups of three, have students write quizzes using the Chicago map. Have them create an answer key on a separate sheet of paper and include questions and answers for both naming the location of buildings and naming the place that is in a location. Also, have them include at least two questions where there is more than one answer. Have the groups trade their quizzes and test one another on their map grid skills.

Modification

Advanced students can use both grid maps in this activity to practice cardinal directions using the compass rose on each. Give clues to locations of places using both the grid and cardinal directions.

Tip

Be sure that students understand that a grid appears on a map, but not on the actual place the grid represents.

Modification

Challenge students' geographic thinking by asking whether the map of the Lincoln Park Zoo or the Chicago map show a bigger place. Help students see that Chicago is larger, and that the zoo is one, smaller place on the map.

Tip

Work with one small group at a time to ensure that all students can see the detail on the projected map.

Informal Assessment

Have students individually demonstrate their skills in using a grid by completing the Using a Grid worksheet. Provide students with blue, green, and orange crayons.

Extending the Learning

- Have students use both the grid squares and cardinal directions on the Chicago map to give directions for how to travel to the Lincoln Park Zoo from different areas of the city.
- Look online for other maps, such as nearby zoos or amusement parks. Talk about how the map is drawn and whether it has a grid. Copy the map and add a grid so that students can practice. You can also have students create clay models of their zoos using their paper zoo as a guide.
- Give students a copy of the Grid graphic organizer. Have students create their own zoo map with the placement of animals inside individual squares. Then they can ask other students to tell them the location of specific animals in their zoo.

OBJECTIVES

Subjects & Disciplines

Geography

Learning Objectives

Students will:

- describe the purpose of a map grid
- use a grid to locate places on a map

Teaching Approach

- Learning-for-use

Teaching Methods

- Discussions
- Visual instruction

Skills Summary

This activity targets the following skills:

- 21st Century Student Outcomes
 - Learning and Innovation Skills
 - Communication and Collaboration
- Critical Thinking Skills
 - Understanding
- Geographic Skills
 - Organizing Geographic Information

National Standards, Principles, and Practices

NATIONAL COUNCIL FOR SOCIAL STUDIES CURRICULUM STANDARDS

- Theme 3:

People, Places, and Environments

NATIONAL GEOGRAPHY STANDARDS

- Standard 1:

How to use maps and other geographic representations, geospatial technologies, and spatial thinking to understand and communicate information

- Standard 3:

How to analyze the spatial organization of people, places, and environments on Earth's surface

COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS & LITERACY

- Reading Standards for Informational Text K-5:

Key Ideas and Details, RI.K.2

- Reading Standards for Informational Text K-5:

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

- **Geographic Representations: Spatial Views of the World: D2.Geo.2.K-2:**

Use maps, graphs, photographs, and other representations to describe places and the relationships and interactions that shape them.

- **Geographic Representations: Spatial Views of the World: D2.Geo.3.K-2:**

Use maps, globes, and other simple geographic models to identify cultural and environmental characteristics of places.

Preparation

What You'll Need

MATERIALS YOU PROVIDE

- Paper
- Blue, green, and orange crayons
- Clay (optional)

REQUIRED TECHNOLOGY

- Internet Access: Required
- Tech Setup: 1 computer per classroom, Projector
- Plug-Ins: Flash

PHYSICAL SPACE

- Classroom

GROUPING

- Large-group instruction

BACKGROUND & VOCABULARY

Background Information

A grid organizes the information on a map into smaller and more accessible segments. Students should be able to relate map grids to grids they use in math and to reading information on charts.

Prior Knowledge

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Recommended Prior Activities

- [The Sun, Earth, and Cardinal Directions](#)

Vocabulary

Term	Part of Speech	Definition
grid	<i>noun</i>	horizontal and vertical lines used to locate objects in relation to one another on a map.
location	<i>noun</i>	position of a particular point on the surface of the Earth.
map	<i>noun</i>	symbolic representation of selected characteristics of a place, usually drawn on a flat surface.
map skills	<i>noun</i>	skills for reading and interpreting maps, from learning basic map conventions to analyzing and comprehending maps to address higher-order goals.
pattern	<i>noun</i>	arrangement of people, places, or things across a specific space.

For Further Exploration

Interactives

- [Splash ABC: Rainforest Grid Map](#)

