

**RESOURCE LIBRARY**

ACTIVITY : 2 HRS 30 MINS

## Analyze a Community Map

Students make observations and gather information over several days or sessions. Then they summarize reasons why public services are located where they are.

**GRADES**

3, 4

**SUBJECTS***Geography, Social Studies, Civics***CONTENTS**

1 PDF, 1 Link

## OVERVIEW

Students make observations and gather information over several days or sessions. Then they summarize reasons why public services are located where they are.

For the complete activity with media resources, visit:

<http://www.nationalgeographic.org/activity/analyze-community-map/>

## DIRECTIONS

*Ideally, this activity will take place over the course of three days or three 50-minute sessions.*

**DAY/SESSION 1**

1. Have students sketch their school and the area around it.

Give students about 15 minutes to each sketch a mental map of their school using drawing paper and pencil. Have them include the streets, buildings, and other sites they can think of that surround the school. You can have students talk first in small groups about what they might include. Have a whole-class discussion about what items they included on their maps.

## **2. Walk the neighborhood and revise sketches.**

Next, take students outside for a walk to see how accurate their sketched maps and ideas were. Give them an opportunity to carry their sketched maps on a clipboard and add to or change their maps based on what they see. Have a few volunteers carry on their clipboards the Walking Tour Survey worksheet. Ask all of the students for their ideas related to the questions on the worksheet, and have the volunteers record the class' ideas.

## **DAY/SESSION 2**

## **3. View a map of the larger area surrounding the school.**

Use the National Geographic MapMaker Interactive to project a larger map of your community. Give each student a printed copy of the same map. Invite a volunteer up to the projected community map to point to the school and then trace the route traveled around the neighborhood on day/session 1. Discuss their ideas from the walk, referring to the recorded Walking Tour Survey worksheet ideas. Have students point out any clusters of businesses, types of homes, and other uses of land on the projected map.

## **4. Plot home and school locations on a large map.**

Next, have students use markers or colored pencils to plot their home and school locations on their printed maps, and invite volunteers to mark their homes on the projected map. Have them plot the route they take from home to school on their printed maps.

## **5. Analyze the spatial arrangement of the community.**

Referring to the projected map, point to different homes and ask students to describe where they are located. Trace a student's route to school. Have students describe the route they take to school. Younger students can use the language of location such as *near*, *far*, and *next to*; older students can include cardinal directions. Circle subdivisions and business areas. Ask:

- *What patterns do you see?*
- *Who lives the closest to school? Who lives the farthest away?*
- *Are the homes clustered, or grouped, around the school? Explain.*
- *Are there clusters of students living in one area? Explain.*
- *Do some students travel long distances to school? Explain.*
- *Why do you think you attend this school and not one in another community?*
- *Who lives north/south/east/west of the school?*

Review students' ideas about why the school is located where it is. Ask students to support their ideas with information from the maps. Record students' ideas on the board.

## **6. Summarize ideas about the school's location.**

Students will start to realize that a variety of factors must be considered when deciding a school's location. Use markers to summarize their ideas on a sheet of chart paper, titling it "Why is our school located here?"

Invite the principal or another official to talk about why the school site was selected as a good place for the school. Have students explain their ideas and discuss them with the principal.

## **DAY/SESSION 3**

### **7. Investigate other neighborhood service locations.**

Choose one or two other neighborhood public service buildings, such as a library, bank, police station, hospital, or fire station, to study. Plot the building's location on the projected and printed maps, and determine what types of buildings surround the site. Arrange a video call with a person working at the location(s) to investigate reasons for the location, or plan a field

trip to the site(s). As students examine each site, use markers and chart paper to list the information that students collect. Information might include the type of service provided, address, buildings surrounding it, and the distance from school. Examine whether there are patterns such as groupings of similar services like police and fire departments, or doctors' offices and florists near a hospital.

### **8. Summarize ideas about locations of services.**

Display the chart paper lists and students' community maps. Ask: *What similarities do you see among the sites? What differences do you see? Write students' ideas about the similarities and differences on the board. Have them count how many times the same ideas were expressed to show the similarities. Ask: Why do you think reasons for site selection are sometimes different?*

### **9. Have students illustrate and summarize their findings.**

Have students draw pictures of each site studied. Have them write two or three sentences below each picture, describing where the site is located and giving reasons for the location of each service.

## Modification

For advanced students, assign each of the services in Step 7 to a small group. Have each group present their ideas and then incorporate feedback from the whole class.

## Tip

For Step 3 you could instead use an official community map, found on most local government websites. Search on the website for maps and GIS—geographic information systems. Most towns and cities provide up-to-date maps for citizens this way.

## Modification

Have family members help with the plotting of home location and route to school in Step 4, as needed. Have students take the assignment home.

# Modification

In Step 2, instead of using the worksheet, use a digital recorder to collect students' ideas.

# Modification

In Step 3, you can have younger students build 3-D maps of the community using small painted boxes and other materials.

## Tip

To create the printed community map for Step 3 in MapMaker Interactive, use the NatGeo base map layer and zoom into the area needed. Click on "print" and follow the instructions. Print in black and white so students can mark locations in color.

## Tip

You can help students develop the spatial concepts of point, line, and area in Step 5 by having them find buildings (points), roads and routes (lines), and parks and subdivisions (areas) on the map.

# Informal Assessment

Check students' work for understanding of the reasons for site selection, use of the address, and positional language (*near, far, between, next to*) for describing location. By the end of the activity, students should be able to explain that a location is accessible to many by public transportation, located in the center of the community, part of a business center, or near other similar services or businesses.

# Extending the Learning

- Have students each choose a new neighborhood public service and decide on a site for it. Have them mark it on their printed maps and draw a picture of the building design. Have them explain why they would build the new service there.
- Invite a guest speaker to class, such as a store owner, restaurant owner, school administrator, or someone else who is planning a new building or facility. Discuss how the guest selected the site.

- Have students work in small groups to design a shopping area. If possible, arrange for students to talk with a mall planner to find out how locations are decided. What are the costs for space? How are costs different in different areas of the mall? Have students draw the mall design and also show placement on the community map. Have them explain the reasons for the site selection and the spatial organization within the mall.

## OBJECTIVES

# Subjects & Disciplines

### **Geography**

### **Social Studies**

- Civics

# Learning Objectives

Students will:

- examine a map of the neighborhood around their school and analyze why that site was selected for the school
- analyze the spatial arrangements of the locations of their homes, school, and community services on a community map
- determine reasons for site selections for neighborhood public services

# Teaching Approach

- Learning-for-use

# Teaching Methods

- Discussions
- Information organization
- Visual instruction

# Skills Summary

This activity targets the following skills:

- 21st Century Student Outcomes
  - Information, Media, and Technology Skills
    - Information, Communications, and Technology Literacy
  - Learning and Innovation Skills
    - Communication and Collaboration
    - Critical Thinking and Problem Solving
- Critical Thinking Skills
  - Applying
  - Understanding
- Geographic Skills
  - Acquiring Geographic Information
  - Analyzing Geographic Information
  - Asking Geographic Questions

# 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 2:

How to use mental maps to organize information about people, places, and environments in a spatial context

- Standard 4:

The physical and human characteristics of places

## COMMON CORE STATE STANDARDS FOR ENGLISH LANGUAGE ARTS & LITERACY

- **Reading Standards for Informational Text K-5:**

Integration of Knowledge and Ideas, RI.3.7

- **Reading Standards for Informational Text K-5:**

Key Ideas and Details, RI.3.2

- **Reading Standards for Informational Text K-5:**

Key Ideas and Details, RI.5.2

- **Reading Standards for Informational Text K-5:**

Key Ideas and Details, RI.4.2

- **Speaking and Listening Standards K-5:**

Comprehension and Collaboration, SL.3.3

- **Speaking and Listening Standards K-5:**

Comprehension and Collaboration, SL.3.1

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

- **Geographic Representations: Spatial Views of the World: D2.Geo.1.3-5:**

Construct maps and other graphic representations of both familiar and unfamiliar places.

### Preparation

### What You'll Need

### MATERIALS YOU PROVIDE

- Chart paper
- Clipboards
- Drawing paper
- Markers
- Pencils

### REQUIRED TECHNOLOGY

- Internet Access: Required
- Tech Setup: 1 computer per classroom, Audio recording device, Projector

### PHYSICAL SPACE

- Classroom



## GROUPING

- Large-group instruction

## OTHER NOTES

- Ideally, this activity will take place over the course of three days or three 50-minute sessions.
- Before Day/Session 2, print a copy of the community map for each student.

## BACKGROUND & VOCABULARY

### Background Information

The locations of neighborhood and community services such as police or fire stations, schools, libraries, hospitals, and banks are often planned to provide convenient access for the entire community. Locations are often selected because they are close to the center of a community, close to public transportation, in a business center or mall, or near other similar services or businesses.

Community planners for both private and public community services use computer mapping, also called Geographic Information Systems (GIS), to analyze the geography of a community and determine needs and possibilities there. Citizens can often access community maps through town or city websites.

### Prior Knowledge

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### Recommended Prior Activities

- [Location and Place in Your School](#)

### Vocabulary

Term	Part of Speech	Definition
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Term	Part of Speech	Definition
cardinal direction	<i>noun</i>	one of the four main points of a compass: north, east, south, west.
geographic information system (GIS)	<i>noun</i>	any system for capturing, storing, checking, and displaying data related to positions on the Earth's surface.
location	<i>noun</i>	position of a particular point on the surface of the Earth.
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.
mental map	<i>noun</i>	an internal representation of a person's personal perceptions, knowledge, and thoughts about a geographic area.
route	<i>noun</i>	path or way.

## For Further Exploration

### Books

- [Sobel, David. \*Mapmaking With Children: Sense of Place Education for the Elementary Years\*. Portsmouth, NH: Heinemann, 1998.](#)

### Instructional Content

- [Important Places in Your Community](#)

