

Exploring My World

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Affiliation Gavilan Peak School
Grade Level 3 - 4
Duration 5 class periods

Arizona Social Studies Standards

Grade 3

Strand 4: Geography

Concept 1: The World in Spatial Terms

PO 3. Construct a map of a familiar place (e.g., school, home, neighborhood, fictional place) that includes a title, compass rose, symbols, and legend.

Grade 4

Strand 4: Geography

Concept 1: The World in Spatial Terms

PO 3. Construct maps using symbols to represent human and physical features.

Other Arizona Standards

The Arts

Grade 3

Beginning Visual Arts

Strand 1: Create

Concept 2: Materials, Tools, and Techniques

PO 101. Identify and experiment with materials, tools, and techniques in his or her own artwork.

Concept 3: Elements and Principles

PO 101. Identify and use elements and principles in his or her own artwork.

Concept 4: Meanings or Purposes

PO 101. Select and use subject matter and/or symbols in his or her own artwork.

Grade 4

Intermediate Visual Arts

Strand 1: Create

Concept 2: Materials, Tools, and Techniques

PO 202. Demonstrate purposeful use of materials, tools, and techniques in his or her own artwork.

Concept 3: Elements and Principles

PO 201. Identify, select, and use elements and principles to organize the composition in his or her own artwork.

Technology Education

ESSENTIALS (Grades 4-8)

Standard 3: Technology Productivity Tools

3T-E2. Use a variety of technology tools for data collection and analysis

PO 1. Use technology device(s) to collect and record data (e.g., science probe, graphing calculator, PDA {personal digital assistant}, alternative keyboards, webcams, GPS and Internet).

Overview

The skill of observation can be developed in young students. Good observational skills can enhance students' writing, artwork, storytelling, and map making.

Purpose

Students will use a GPS unit to identify the location of physical and human features and then use the data to create a map and a piece of artwork.

Materials

- GPS units
- eTrex Legend Quick Reference Guide
- Clipboards, pencils
- Exploring My World Worksheet – 1 per student
- Teacher-created grid of the neighborhood
- Drawing paper
- Art supplies
- Aerial photography of the school neighborhood
- Internet and Google Earth
- Exploring My World Rubric – 1 per student

Objectives

Students will:

- Plot items located in the school neighborhood using a GPS unit and Google Earth
- Create a map that includes a title, compass rose, symbols, and legend
- Use shapes, lines, balance, and proportion
- Create an artistic representation of collected data

Lesson Components

Prior to the Lesson: The teacher will create a grid of the neighborhood traveled, using the GPS coordinates. Permission for leaving the school ground to walk around the neighborhood must be secured prior to presenting the lesson. Additional adult supervision may be required.

Prerequisite skills: Students will have knowledge of artistic elements and principles and know how to use a GPS unit and Google Earth.

Session One and Two

1. Put two columns on the whiteboard. Label one Human Features and the other Physical Features. Conduct a discussion of how human features (roads, buildings, gardens, stores, etc.) are created by people and physical features (natural vegetation, mountains, rivers, etc.) are created by nature. Have the students generate 5 examples under each of the column headings. Have the students predict which they would find more of in their school neighborhood – human or physical features.
2. Divide students into groups of 4-5.
3. Distribute the eTrex Legend Quick Reference Guide and a GPS unit to each group.

4. Review the features of the GPS unit.
5. Pass out a clipboard, pencil and Exploring My World Worksheet to each student. Explain that each group will be locating 10 different human or physical features as they explore the neighborhood.
6. Emphasize that each member of the group should record the same 10 features.
7. Walk around the neighborhood. The group will record 10 items of interest on the Exploring My World Worksheet. Examples: playground, parking lot, flagpole, traffic signs, houses.

Session Three and Four

1. Using Google Earth: <http://earth.google.com> , view and print an aerial image of the school neighborhood. Discuss the features that are recognizable from the air.
2. Working as a group, each member of the group will plot out the items that were recorded on the Exploring My World Worksheet on the teacher prepared grid. They will use a symbol for each item.
3. Remind the students to include a title, compass rose, and legend for the symbols.

Session Five

1. Each member of the group will choose a different feature recorded on the Exploring My World Worksheet.
2. The students will draw the feature on a piece of drawing paper using shading, depth, lines, and shapes to create an artistic image.

Assessment

Use the Exploring My World Rubric for grading the Exploring My World worksheet, the map that is created, and the resulting piece of art. All items are included on the rubric.

Extensions

Share and discuss the students' maps and artwork.

- How did the Google Earth image help to create the map?
- Did your map look like Google Earth's map?
- Can the aerial photography be viewed as art?

Sources

Google Earth <http://earth.google.com>

Exploring My World Worksheet

Name: _____

Date: _____

Identify 10 natural or human features in the school neighborhood and record them below with their coordinates.

Symbol	Item Located	GPS Coordinate North/South	GPS Coordinate East/West
E X A M P L E 	Fire hydrant	N 33° 25' 10"	W 111 ° 56' 12"

Exploring My World Rubric

Name: _____

Date: _____

Skill	Goal	Fair 1 pt.	Good 3 pts.	Excellent 5 pts.	Score
Exploring My World Worksheet	I included a symbol, item description, and coordinates for 10 items of interest.				
Map	My map includes: 10 items of interest with latitude and longitude coordinates.				
Map	My map includes a title, compass rose, symbols, and legend.				
Artwork	I have applied art concepts of correct shapes, lines, balance, and proportion.				
Artwork	I created an artistic representation of collected data.				
Total					