

There's A Map on My Lap!

Author James Carrasco-Kinney
Grade Level 6
Duration 4-6 class periods

National Standards

GEOGRAPHY

Element 1: The World in Spatial Terms

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

AZ Standards

ELA

Reading

Key Ideas and Details

6.RI.2 Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgements.

Integration of Knowledge and Ideas

Writing

Production and Distribution of Writing

6.W.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

Arizona Social Science Standards

The use of geographic representations and tools helps individuals understand their world.

6.G1.1 Use and construct maps, graphs, and other representations to explain relationships between locations of places and regions. Key concepts include major landforms and water bodies, countries, cities, ecosystems, climate, languages, religion, economic systems, governmental systems, population patterns, disease, trade routes, and settlement patterns

SIOP Elements

Preparation

Adapting content

Linking to background

Linking to past learning

Strategies used

Scaffolding

Modeling

Guided practice

Independent practice

Comprehensible input

Grouping Option

Whole class

Small groups

Partners

Independent

Integrating Processes

Reading

Writing

Speaking

Listening

Application

Hands on

Meaningful

Linked to objectives

Promotes engagement

Assessment

Individual

Group

Written

Oral

Arizona English Language Proficiency Standards

Stage IV

Basic

Reading

Standard 4: The student will analyze text for expression, enjoyment, and response to other related content areas.

B-4: answering who, what, where, when, why, which and how questions about text.

Writing

Standard 1: The student will express his or her thinking and ideas in a variety of writing genres.

There's a Map on My Lap!

B-6: writing a variety of functional text (e.g., *instructions, directions*) that addresses the audience, stated purpose and context.

Overview

While many people think paper maps are no longer needed, maps are still important whether they are for finding our way or understanding important information that can be synthesized into a visual image easily interpreted by others. Paper or an image on an electronic device—map reading is still a life-long skill.

Purpose

In this lesson students will learn the differences in a variety of maps. Students will be able to identify the purpose of the map and why it is useful. By creating maps, the students will demonstrate their knowledge of map reading skills.

Key Vocabulary

cartographer: a person who makes a map

map: a flat representation (2-d) of the earth or a part of the earth that shows the relative position of places

physical map: a map that shows natural features like mountains, rivers, etc.

political map: a map that shows territorial boundaries like cities, states, or countries

topographical map: a map that shows the shape and changing elevation of the land's surface

resource map: a map that shows what natural resources can be found in an area

road map: a map that shows the transportation routes of an area

population map: a map that shows the amount of people who live in an area usually by different colors or by increasing the sizes of dots

Materials

- There's A Map on My Lap! All About Maps by Tish Rabe book
- Chart Paper/poster board
- Markers/colored pencils
- Duct tape for making a big book
- Glue
- Scissors
- Display of maps of the World (Topographic, Political, Physical, Population, Road, and Resource)
- Introduction to the Various Kinds of Maps
- Vocabulary Cards and Test
- A Political Map Summary

- A Physical Map Summary
- A Population Map Summary
- A Road Map Summary
- A Topographical Map Summary
- A Resource Map Summary
- Chart Directions
- Chart Rubric
- Gallery Walk
- Map Analysis with a Geographic Lens

Objectives

The student will be able to:

1. Identify the characteristics and purposes of different types of map.
2. Apply the principles of good map making to a map that is created.

Procedures

Prerequisite: Students should have gone through DOGSTAILS to review the parts of a map.

<https://geoalliance.asu.edu/dogstails>

Note: The maps listed with this lesson under Sources would work well for students in lower grades, especially 3rd grade since they are mostly Arizona maps. However, for the average 6th grade class, it is encouraged to have students find their own maps online (of the type assigned) and recreate them on the chart paper instead of using the abbreviated versions of the Alliance maps.

SESSION ONE

Prior to this session, gather and display different types of maps (physical, political, population, resource, etc.) to allow students to see a variety of maps.

Engage:

- a. Introduce the lesson by having students discuss with a partner what they know about maps. Then have the students respond as a whole class and record their responses on the white board. .
(Preparation: Linking to Background, Grouping Option: Partners, Whole class)
- b. Partner ELLs with English proficient students to clarify any English words that may be confusing. Distribute the Introduction to the Various Kinds of Maps worksheet. As they are walking, have students write what they notice about the different maps. **(Application: Promotes engagement)**
- c. Remind students that as you read the book, There's A Map on My Lap! All About MAPS,

There's A Map in My Lap!

aloud to the class, you will be stopping to discuss points with the class about maps and they should be completing their Introduction worksheet.

- d. Introduce the vocabulary words by using the vocabulary cards created for this lesson. Post the vocabulary cards on the board to create a word wall. Students should record these words and their definitions in their social studies notebook and draw a picture to support the definition. ELLs can write the word in their native language if this helps them. **(Scaffolding: Comprehensible input)**
- e. Divide students into groups of 4-6, mixing abilities and including ELLs with English proficient students. **(Grouping Option: Small groups)**
- f. Distribute the Anchor Chart Directions and explain how each group will be making an anchor chart featuring a different type of map. Review the directions with students and discuss the criteria on the rubric. **(Preparation: Adapting content, Scaffolding: Comprehensible input)**
- g. Continue to explain that since the anchor charts will be combined to make a big book, they should make a rough draft first before they make the final copy. Emphasize working cooperatively will produce the best product.
- h. *Note: If you want to do one of the map summary pages as a whole class to demonstrate the steps needed to read the summary, find a map, and create a big book page; it is suggested that you use a map type not featured in the 6 examples given here. You could do aerial maps, GPS screen shots, choropleth, or thematic maps as examples.* **(Scaffolding: Modeling)**
- i. Assign groups their type of map and distribute the map summary appropriate for that group and highlighters. Remind students that the vocabulary in the summary is defined in their social studies notebooks, and they should refer to this source as the summaries are read. **(Scaffolding: Comprehensible input)**

Explore:

- a. Give each group time to assign roles, read their summary, and highlight at least five characteristics of this type of map. **(Integrating Processes: Reading, Writing)**
- b. Then allow time for students to find a map on the Internet and discuss how they will be creating their anchor charts. **(Application: Promotes engagement)**
- c. Monitor groups as they produce a rough draft of their anchor chart and get approval to move on to making the chart.

SESSION TWO

Prior to this session, create the Title Page for the big book.

- d. Distribute chart paper and art supplies for the final draft and the Chart Rubric. Thoroughly explain how the anchor chart will be graded. **(Scaffolding: Comprehensible input)**
- e. As students are working, move from group to group asking these questions:
 - o What characteristics does your type of map have?
 - o When do you think people use this type of map?
 - o Can you think of a reason you would need to use a map like this?
 - o What type of legend do you need to create?
 - o What would be a good title for your map?**(Application: Meaningful, Promotes engagement)**
- f. Post completed charts around the room.

SESSION THREE

- g. Assign each group the task to create a one minute oral presentation explaining the characteristics of their type of map and its legend. Give groups a few minutes to practice. One volunteer from each group will present the anchor chart to the other students. **(Integrated Processes: Speaking, Listening)**
- h. Distribute the Gallery Walk Recording Sheet. Have students record information about their own map on the worksheet before entering information about the other maps as a check for understanding. **(Scaffolding: Independent practice)**

Explain:

- i. The volunteer for the oral presentation stays at the group's anchor chart and teaches the other groups about this type of map while the groups rotate through the anchor charts. **(Integrating Processes: Speaking)**
- j. As groups rotate, students record information on their Gallery Walk Recording Sheet. **(Application: Linked to Objectives)** (Integrating Processes: Listening, Writing) Each rotation should take 2 minutes.
- k. When groups get back to their anchor chart, they rotate one more time. They teach the person who stayed behind about each of the types of maps, and that student records information on their gallery recording sheet. **(Integrating Processes: Listening, Writing)**
- l. Close the session with student discussion about which type of map they found to be most practical or which they found to be the hardest to use.

SESSION FOUR

There's A Map in My Lap!

Prior to this Session: Remove the anchor charts and combine with duct tape to make a big book. To make the big book lay one anchor chart down face up, then take the second chart paper also face up and tape one half of the book to the back side of the first anchor chart. Keep repeating this step until all the pages are taped. Then tape around all the edges with duct tape.

Elaborate:

- Divide students into groups of three. Distribute 6 Map Analysis with a Geographic Lens worksheets to each member of the group. Hand each group one of the six types of maps studied in this lesson. (**Grouping Option: Small groups**)
- Have groups work together to answer the six questions. Once they have completed their worksheet, then they will swap maps with another group and analyze this map using a new worksheet.
- After each group has analyzed the six maps, come back as a whole class. Hold a class discussion about the maps the answers students have written. Emphasize how each map has a special purpose (Reflect: Question1) and that is why we have this type of map.

SESSION FIVE and SIX (Optional)

Prior to this session, obtain a school map.

Evaluate:

- Inform students that they will be evaluated by creating a school map that reflects one of the types of maps they have been studying. Have students randomly draw for which type of map they will be creating of the six types or the teacher can assign the type of map.
- Distribute a basic map of the school. Remind groups will need to create a map with all of the elements of a good map and must showcase the characteristics of that type of map.
- When the groups are finished creating their maps, they will prepare a 30-60 second map presentation of their map to the class explaining the characteristics of their type of map and its legend.
- After their presentations students post their map under the heading of their type of map for future reference.

Assessment

Geography and ELA

Introduction to the Various Kinds of Maps worksheet can be graded for completeness. Mastery will be considered 90% or higher.

Gallery Walk Recording Sheet can be graded for completeness. Mastery will be considered 90% or higher.

The Vocabulary Test can be used to measure language acquisition. Mastery will be considered 6 points out of 8 points on the Vocabulary Test.

The Anchor Chart Rubric can be used to score geography content and ELA skills. Mastery will be considered 16 points or higher.

Extensions

- Find a variety of maps and keep the title hidden. Students would then need to use context clues to decide what type of map it is and possibly come up with an appropriate title for the map.
- Locate places on a map use the Alpha-Numeric Grid system and/or their grid coordinates using latitude and longitude.
- Calculate distance using scale with the string method as explained in the book *There's A Map on My Lap!*

Sources

- There's A Map on My Lap! All About Maps* by Tish Rabe

Maps (recommended for 3rd grade)

- Political Map
Arizona
<http://geoalliance.asu.edu/sites/default/files/maps/AzcitiesCompassLatLong.PDF>
- Topographic Map Using Contour Lines
Hike to Indian Garden-Grand Canyon
http://geoalliance.asu.edu/sites/default/files/maps/BW_Indian_Gardens_ft.pdf
- Resource Map
Africa's Resources map
https://geoalliance.asu.edu/sites/default/files/maps/Africa%20Resources_10_20_15.pdf
- Physical Map
Southwestern United States: Topography
http://geoalliance.asu.edu/sites/default/files/maps/SouthwestTopo_BW.pdf
- Road Map
Arizona Roads
<http://geoalliance.asu.edu/sites/default/files/maps/azroads.pdf>
- Population Map

There's A Map in My Lap!

http://geoalliance.asu.edu/sites/default/files/maps/AZLandscape_color.pdf

http://geoalliance.asu.edu/sites/default/files/maps/AZcounty_pop.pdf