



Decoding Maps



Essential Question

- How does art help us understand the past?
- How can we learn about the world from art?

VOCABULARY

cartographer
map
analyze
infer
Interpret

Materials List

- Copies of European maps, included in the resources.

Pacing

2 sessions

Assessment

SUMMATIVE

Students will analyze two different maps from the Age of Exploration.

Elements of VISUAL ART

- Shape
- Space
- Form

CONTENT Standard

NGSS 4-ESS2-2

Analyze and interpret data from maps to describe patterns of Earth's features.

Additional Standards Addressed:

ARTS Standard

VA:Cn11.1.4a

Through observation, infer information about time, place, and culture in which a work of art was created.

Additional Standards Addressed:

CCSS.ELA-LITERACY.W.4.1
CCSS.ELA-LITERACY.W.4.1.B

21st Century Skills

- Critical Thinking
- Informational Literacy

Lesson Objective

Students will infer key information about a map from the time of European Expansion and exploration to the New World

Lesson Overview

In this lesson, students will infer and synthesize information about the Age of Exploration through the study of maps from the time period. They will consider the source of the map along with the purposes of exploration while also taking into account Earth's features as depicted by the maps.



Artful Thinking Routine

Step Inside routine

Have students look at the painting [Columbus Before the Queen](#), by Emanuel Gottlieb Leutze

- Choose a person, object or element in an image or work of art, and step inside that point of view. Consider:
 - What can the person/thing perceive and feel? What might the person/thing know about or
 - believe?
 - What might the person/thing care about?

Artful Thinking by Project Zero is licensed under a Creative Commons AttributionNonCommercial 4.0 International License. Routine found here: <http://pzartfulthinking.org/>



Introduction

Still using the painting from the Artful Thinking routine, ask students to take on the character they had chosen in the scene and improvise a monologue. If there are multiple students that chose the same person, they could work together to create what the person might be saying. They should speak in the first person, talking about who they are and what they might be thinking.

Ask students where they think this is happening? Does it remind them of anything? *(If you have been doing a study of the Age of Exploration, this might emerge quickly, as Columbus may seem familiar to students)*



Age of Exploration

It is assumed that you have already conducted a study about the Age of Exploration with students. Review the main topics that you have studied within your curriculum. This may include:

- Time period: late 15th century through 17th century
- Key people: Cabot, Columbus, Magellan, Verrazano, Hudson
- Reasons: Looking for new trade routes, wealth, knowledge
- Improvements in navigation and mapping emerged
- New foods, new diseases, new animals were introduced and exchanged between Europe and the New World.
- Many explorers were in search of the Northwest Passage that would signify shorter trade routes to Asia.



Teacher to Teacher

This review can take as much time as you need it to. The more knowledge and understanding students have of the time period, the more insightful their map analysis will be.

It is also possible to do the map analysis with little to no understanding of the Age of Exploration. If this is the case, their analysis will link quite different. This could be a very strong introductory lesson to the unit.



Cartographers

Discuss the role of a cartographer and its importance many centuries ago. Be sure to lead the discussion in a way that students realize the inevitable bias that may have happened when maps were being drawn by hand:

- How accurate was the information?
- For unknown areas, how was the work interpreted?
- Was there a reason for the map to be made?
- Would maps be made differently for different audiences?

How do the answers to these questions differ today?



Main Activity

Give students a copy of each of the two maps provided. Students will engage in a See, Think, Wonder activity for each map. This portion of the analysis could be done in small groups if you desire, but in order to get a true understanding of each student’s thinking, the actual analysis of the maps provided should be done independently.

After the See, Think, Wonder activity, students will independently complete the analysis sheets provided.

While there are photographic copies of the maps included in the resources, links to them are provided here. For both of the maps, looking at them on a device will allow students to zoom in to look more closely at details. Note: By clicking on the picture, you will view the map in a media viewer, which allows for close up and moving it around. You may want to pre-load this for students so they do not see the year of creation.

[\[Visscher Map\]](#)
[\[Old World Map\]](#)

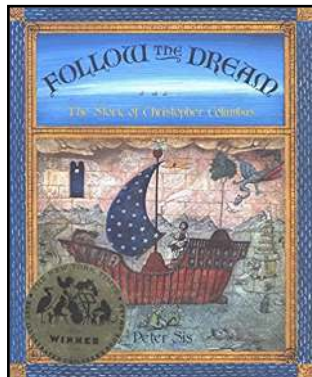
Estimated Time: 45-60 minutes

CLOSURE

Have students from different groups combine to share their See, Think, Wonder findings. Were there things that some didn’t think about or notice? Come back together as a whole group and discuss what surprised students in general about the maps that they looked at.

Tell them that Map 2 was created first. (Map 1: 1658 / Map 2: 1565). Does that surprise them? Why or why not. Have them think about their original response as to which one was created first and why.

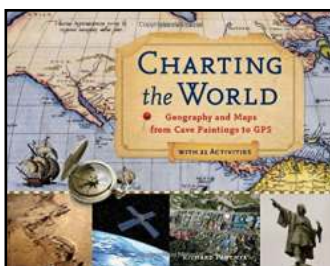
Literature Connections



Follow the Dream: The Story of Christopher Columbus

Peter Sis

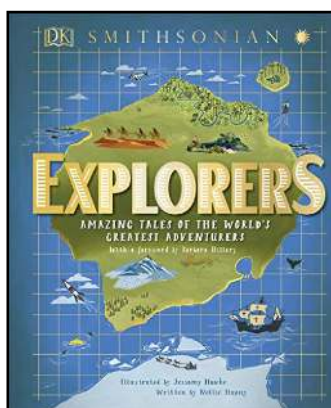
A wonderful picture book about Columbus that almost feels as if it were written and illustrated by a cartographer. Brief text on each page, but great detail in the artwork to allow a glimpse into the 15th century.



Charting the World

Richard Panchyck

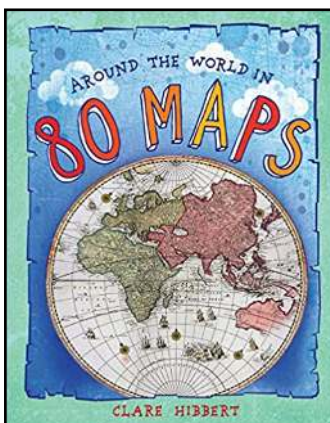
The history of maps told through illustration and photographs, including mapmakers, explorers and technology. A wealth of information for students who want to know more!



Explorers: Amazing Tales of the World's Greatest Adventurers

Nellie Huang

Looks like a picture book, but an information filled adventure that takes you inside the journeys of many explorers. Rich illustrations and filled with facts that will leave your students in awe.



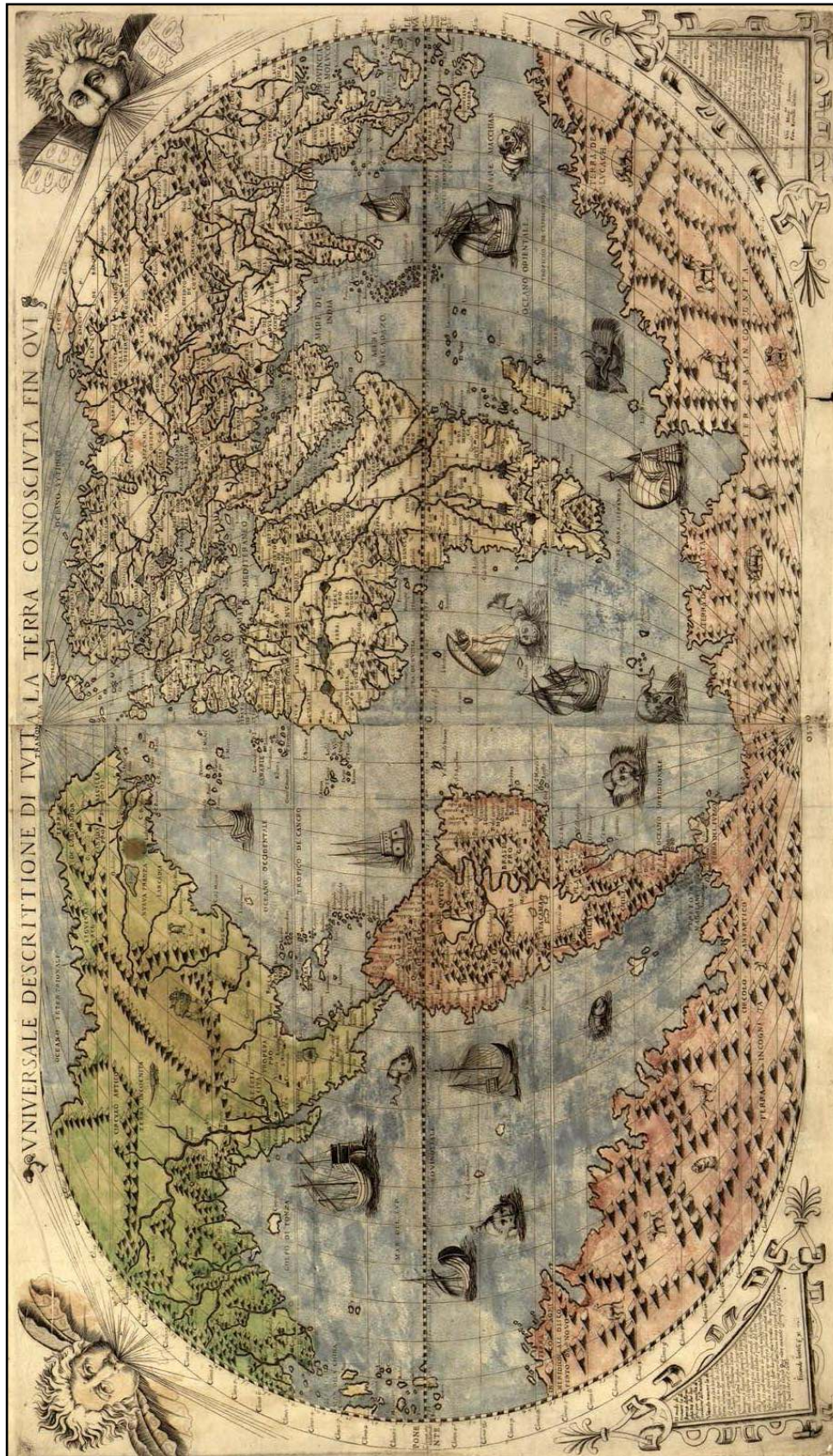
Around the World in 80 Maps

Clare Hibbert

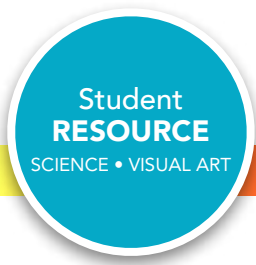
This book will have students traveling around the world, looking at maps from all over, and from time period ranging from the 15th century to the 19th century. There are many details to observe and notice which will spark inquisitive minds.



MAP 1: Visscher Map of North America and South America



MAP 2: Old World Map



See Think Wonder - Map 1

SEE

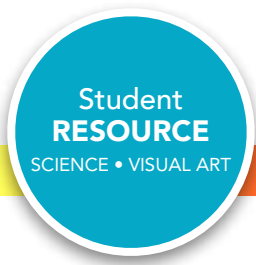
What do I SEE?

THINK

What do I THINK about it?

WONDER

What do I WONDER?



See Think Wonder - Map 2

SEE

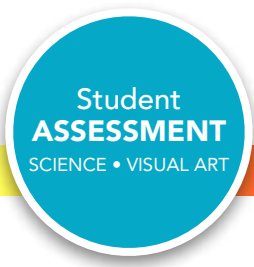
What do I SEE?

THINK

What do I THINK about it?

WONDER

What do I WONDER?



Decoding Maps

Name: _____ Date: _____

	Map 1	Map 2
Put an X under the map you think was created first? Why?		
What decade do you think each map was created?		
Where do you think the cartographer for each map was from?		
What can you tell about the patterns of the Earth and the landforms from the maps?		



Explain what you know about Map 1. Be sure you include your reasoning and evidence. *Hint: Use your See, Think, Wonder chart.*

pg. 10



Explain what you know about Map 2. Be sure you include your reasoning and evidence. *Hint: Use your See, Think, Wonder chart.*

pg. 11

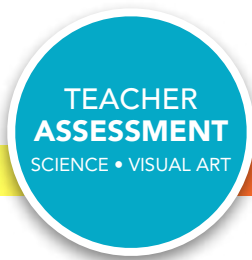


Decoding Maps

Name: _____ Date: _____

Compare the two maps. What can you infer about the thinking and knowledge of each of the cartographers? Consider truth versus belief, and the representation of the Earth.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



Decoding Maps

Total Score:

___ / 8

Student: _____

CRITERIA	Distinguished (4 Points)	Excelled (3 Points)	Adequate (2 Points)	Basic (1 Point)
The student is able to analyze and interpret data from maps to describe patterns of Earth's features.	<input type="checkbox"/> The student is able to analyze and interpret data from maps to describe patterns of Earth's features in the context of the map and clearly shows their own knowledge in their interpretation.	<input type="checkbox"/> The student is able to analyze and interpret data from maps to describe patterns of Earth's features.	<input type="checkbox"/> With support, the student is able to analyze and interpret data from maps to describe patterns of Earth's features.	<input type="checkbox"/> The student is unable to analyze and interpret data from maps to describe patterns of Earth's features.
The student is able to infer information about time, place, and culture in which a work of art was created through observation.	<input type="checkbox"/> The student is able to clearly and independently infer detailed and complex information about time, place, and culture in which a work of art was created through observation.	<input type="checkbox"/> The student is able to infer information about time, place, and culture in which a work of art was created through observation.	<input type="checkbox"/> With support, the student is able to infer information about time, place, and culture in which a work of art was created through observation, or they are able to do so minimally on their own.	<input type="checkbox"/> The student is unable to infer information about time, place, and culture in which a work of art was created through observation.

NOTES: