

The Vinland Map

Secondary: (ages 11 – 14)

Interdisciplinary (history, geography, science)

Students are familiar with the contemporary map of the world, and its images of continents and oceans. In this activity, they find out how people discovered the Earth and learned to put their discoveries on the map. The Vinland map, found in the middle of the 20th century, may be evidence of the presence of the Vikings in the American continent a long time before Christopher Columbus. However, we still don't know if this map is original or fake. While working with the Vinland map, students, on the one hand, learn new facts from history and develop the skills of working with maps. On the other hand, they try to evaluate the authenticity of given facts. Creativity can be shown while comparing modern and ancient maps and trying to find a basis for the interpretation of the ancient map. The analysis of different points of view requires critical thinking.

Time allocation 1 lesson period

Subject content Analyze and interpret maps
Use knowledge of world map and time-scales of historical events
Develop knowledge of the Vikings

Creativity and critical thinking This unit has a **creativity** and **critical thinking** focus:

- Consider several perspectives on how to interpret maps
- Question generally accepted ideas about discovery of U.S.
- Appraise evidence and distinguish true from fake information

Other skills Collaboration, Communication

Key words Columbus; Vikings; America; Maps; Cartography; Sea-faring

Products and processes to assess

Students present and discuss their attempts to creatively solve the practical problem of comparing modern and ancient maps and finding evidence on whether the Vinland map is genuine or fake. At the highest levels of achievement they consider several alternative hypotheses and carefully analyze the reliability of the evidence that supports them. They show openness to the perspective of others and a willingness to generate, explore, and challenge a range of unusual ideas to interpret the map. They draw on their knowledge of world geography and history to make persuasive arguments about the map's authenticity, whilst acknowledging the uncertainty and limits of their chosen position.

This work was developed by teachers in Russia for the OECD for the CERI project *Fostering and assessing creativity and critical thinking skills*. It is available under the [Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO](https://creativecommons.org/licenses/by-nc-sa/3.0/) licence (CC BY-NC-SA 3.0 IGO). © OECD

Teaching and Learning plan

This plan suggests potential steps for implementing the activity. Teachers can introduce as many modifications as they see fit to adapt the activity to their teaching context.

Step	Duration	Teacher and student roles	Subject content	Creativity and critical thinking
1	Lesson period 1	<p>Teacher: The world map hasn't always been as you know it now. Earlier people didn't know of the existence of different continents. They discovered the world gradually while traveling in boats and ships, camels, horses and on foot.</p> <p>Teacher tells the class about the discovery of an ancient map in the 20th century: Scientists investigated the map for a long time, but didn't prove if it was genuine or fake. This is how the map looked (teacher shows picture B on projector and gives students picture A).</p> <p>Your task is to compare the ancient and the modern maps and try to understand:</p> <p>1) Where did the people who drew this map live and travel? Be ready to explain your reasoning.</p> <p>2) What/where is this Vinland place? (indicated with question mark on map). Be ready to explain your reasoning.</p> <p>You have 10 minutes to discuss these questions in groups. When your group is ready to answer, make a sign.</p>	<p>Learning about the history of the world map</p> <p>Sharing knowledge of geography and interpretation of maps and playing an active role in group work</p>	<p>Making connections to knowledge about geography and history in order to read maps</p> <p>Considering several perspectives on how to interpret maps</p> <p>Playing with and critically reflecting on unusual ideas in order to generate an interpretation of the Vinland map</p>
2		<p>Group presentations. Groups seek to justify their points of view and compare the maps. Other students give their remarks and considerations.</p> <p>Comments for teacher:</p> <p>There have been debates about whether it's true that the Vikings discovered America. The main sources of information concerning the Vikings' travels towards the North American coast are two Icelandic Sagas, "The Saga of Erik the Red" and "The Greenland saga". These sources also suggest that the Vikings founded settlements in North America, but abandoned them for various reasons. Viking camps on the shores of North America were later found.</p> <p>Task 1 comment. The place indicated with a question mark is what the Vikings called Vinland in these sagas. On the modern map it is a part of the Labrador Peninsula, near Greenland. The Vikings supposedly travelled from the modern part of Scandinavia and Iceland to Vinland passing by Greenland. (One saga tells us that Vikings landed on America the first time accidentally. They wanted to go to Greenland, which was being actively settled and searched for resources, but they changed their route due to a storm).</p>	<p>Communicating ideas using adequate arguments that draw on historical and geographical knowledge</p>	<p>Questioning generally accepted ideas about the discovery of America</p>

Task 2 comment. For now, scientists have come to an agreement that the Vikings “discovered” North America before Columbus, in about the year 985-986. In Western Europe, however, people didn’t know about this, which is why Christopher Columbus is said to have discovered America with his first voyage there in 1492. Also there’s still a debate between historians if the map is real or fake.

3	<p>Teacher confirms that there might be a way by which the ancient inhabitants of North Europe known as the Vikings, went towards the coast of America. Vinland could have been the part of America that the ancient travelers discovered. This is supported by the 1960 finding of Viking settlements in Newfoundland (the island near the north-east shores of North America). Teacher shows pictures of Vikings, Viking ships, and the North America map.</p> <p>But it is still unknown if the map is real or fake. Teacher offers to elaborate on this and provides a time scale and different facts about the ancient map (see Appendix 2). Teacher: Try to understand whether the map is real or fake. Justify your opinion with the facts. You have about 10 minutes for this work. Students work in groups using the time scale and facts and placing them into columns marked evidence for and evidence against</p> <p>Comments for teacher: Facts can be given in a list. Also you can cut them in strips in order for students to glue them in the table. It is also possible to give students the facts already arranged in a table.</p>	<p>Learning about the Vikings, Viking ships, and geography</p>	<p>Reviewing and comparing alternative theories</p> <p>Identifying strengths and weaknesses of evidence and justifying own opinion</p>
4	<p>Discussion of the group versions. When the groups are ready, the teacher asks who thinks the map is real, and who thinks the map is fake. Students divide themselves into two groups. If all the children took one side, teacher takes another. On the blackboard there is the time scale, where one can mark the years if needed. Students present and try to justify their versions.</p> <p>As a final activity, the teacher could facilitate a reflective discussion – or written work – on what has been learned from the activity and on how to appraise evidence and distinguish true from fake information.</p>	<p>Producing adequate arguments for one’s point of view, drawing on historical, geographical, and historical points of view</p>	<p>Discussing and appraising conflicting views and reflecting on uncertainty or limits of opinions</p>

Resources and examples for inspiration

Web and print

- Text of the task, Scheme of Vikings map (B), a physical world map and a globe for each group
- Further information about the Vinland map can be found here <http://vinland-map.brandeis.edu/explore/historical/index.php> and here <https://www.nytimes.com/1996/02/13/science/disputed-medieval-map-called-genuine-after-all.html>

Other

- Billboard, markers
- Projector (to show ancient map, Viking ships, modern map)
- Images of Vikings and objects connected to them
- World map

Opportunities to adapt, extend, and enrich

- This could form part of a larger unit on appraising evidence and distinguishing fact from fiction. See, for example, the activity *Do you believe in dragons?* in this same series
- Follow-up activities could ask students to imagine another civilisation arriving in the US pre-vikings or pre-columbus (or to find another historical example of "discovery" that could be challenged in the same way) and to write stories inspired by this, as well as imagining the type of evidence needed to defend such stories.

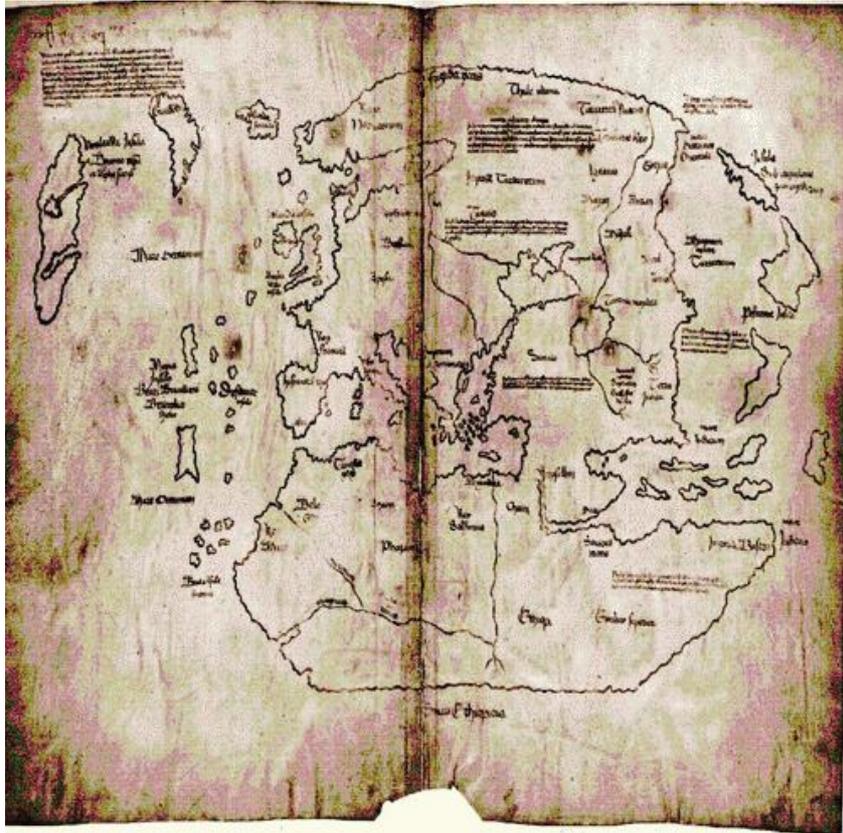
Creativity and critical thinking rubric

- Mapping of the different steps of the lesson plan against the OECD rubric to identify the creative and/or critical thinking skills the different parts of the lesson aim to develop

	CREATIVITY Coming up with new ideas and solutions	Steps	CRITICAL THINKING Questioning and evaluating ideas and solutions	Steps
INQUIRING	Make connections to other concepts and knowledge from the same or from other disciplines	1-4	Identify and question assumptions and generally accepted ideas or practices	1-4
IMAGINING	Generate and play with unusual and radical ideas	1	Consider several perspectives on a problem based on different assumptions	1-4
DOING	Produce, perform or envision a meaningful output that is personally novel		Explain both strengths and limitations of a product, a solution or a theory justified on logical, ethical or aesthetic criteria	1-4
REFLECTING	Reflect on the novelty of solution and of its possible consequences		Reflect on the chosen solution/position relative to possible alternatives	1-4

APPENDIX 1

Map A



Map B



APPENDIX 2: Facts for one group.

1. In 1960 the Viking settlement on the coast of North America was discovered.
2. The map was originally found in a book from the 15th century that was on sale before the discovery of the Viking settlement in North America (in 1957).
3. The parchment on which the map is drawn has holes made by woodworms in the same places where the book it was found in has holes.
4. The ink the map was drawn in contains a rare mineral known as anatase. It has been used for making ink since 1920.
5. On the ancient map the shape of several islands and continents look like modern pictures taken from space.
6. In the past ink was sprinkled with sand in order to dry it. Sand contains different minerals.
7. The map contains images of islands that were marked on the modern map only in 1901.
8. The parchment on which the map is drawn was made between 1423 and 1445.

Additional information for the teacher

Arguments for map being authentic	Arguments for map being fake
In 1960 a Viking settlement on the coast of North America was discovered.	
The map was originally found in a book from the 15 th century, that was on sale before the discovery of the Viking settlement in North America (in 1957).	On the ancient map the shape of several islands and continents look like modern pictures taken from space.
The parchment on which the map is drawn has holes made by woodworms in the same places where the book has holes.	
In the past the ink was sprinkled with sand in order to dry the ink. Sand contains different minerals.	The ink the map was drawn with contains a rare mineral known as anatase. It has been used for making ink since 1920.
The parchment on which the map is drawn was made between 1423 and 1445.	
	The map contains images of islands that were marked on the modern map only in 1901.

APPENDIX 3

Group work sheet

(participants)

1st stage of the work

Your task. In 1957 the ancient map was put up for sale. Compare it with the modern world map. List your suggestions, answering the questions.

1) What is this 'Vinland' place, indicated with a question mark?

Answer:

2) Where did the people who made this map live and travel to? Who were they?

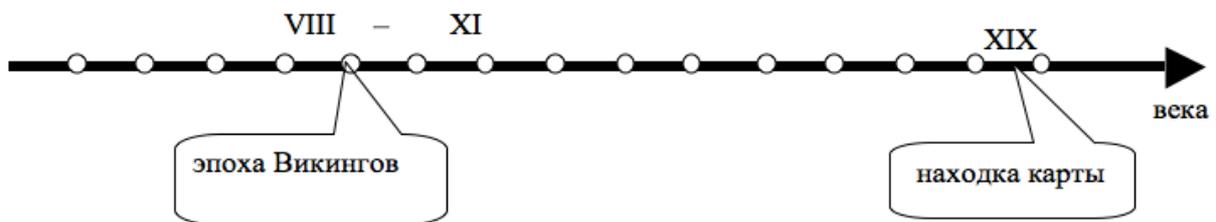
Answer:

Attention! While considering these questions, remember to give arguments supporting your points of view.

2nd stage of the work

1. Discuss the facts on the pieces of paper that have been given to you.
2. When analyzing the facts, use the time scale and the table if you need them.
3. Was the ancient map real or fake? Try to prove your viewpoint using the facts.
4. Prepare a brief yet reasonable presentation of your viewpoint.
5. Fill only the chart's column that refers to your viewpoint.

Шкала времени



Example from Russia: (Time scale. 8th-11th centuries – Viking Age; 19th century – finding of the map)

You may fill the following table with the facts the teacher gave to you, as well as your own reasoning.

Evidence for the map being real	Evidence for the map being fake