

How Maps Changed the World

A History of Exploration

From clay tablets to GPS — how drawing lines on paper shaped civilisation

■ B1 Reading ■ 30 min ■ World Around Us

Level	B1 (Intermediate)
Skill	Reading
Topic	World Around Us
Duration	30 minutes
Age Group	Teens & Adults

Learning Objectives

- ◆ Read and understand a text about the evolution of maps and cartography
- ◆ Learn 15 key vocabulary items related to history, geography, and technology
- ◆ Trace the journey from ancient maps to digital navigation
- ◆ Discuss the role of maps in shaping history and power
- ◆ Write a creative paragraph about navigating without technology

1 Before You Read — Finding Your Way

Think about maps and navigation and discuss:

1. When was the last time you used a paper map? Do you even own one?
2. How would you find your way to a new place without your phone?
3. Can you think of a time in history when having a good map gave someone a huge advantage?

2 Reading: Lines That Changed History

Lines That Changed History: The Story of Maps

Take out your phone and open a map application. Within seconds, you can see exactly where you are, get directions to anywhere on Earth, view satellite images of your house, and check real-time traffic conditions. This **technology** feels so natural that we rarely stop to appreciate how extraordinary it is — or how dramatically the history of maps has shaped the world we live in. For thousands of years, maps were among the most powerful and **valuable** objects in existence. Wars were won and lost, empires were built and destroyed, and entire continents were "discovered" — all because someone drew lines on a piece of paper.

The First Maps

The oldest known map is a small clay **tablet** from ancient Babylon, dating back approximately 2,600 years. It shows the world as the Babylonians imagined it: a flat disc surrounded by water, with Babylon at the centre. Earlier civilisations also created maps — cave paintings in France that are 14,000 years old appear to show rivers, mountains, and animal migration routes — but the Babylonian tablet is the first recognisable attempt to represent the **entire** known world.

The ancient Greeks made enormous **contributions** to cartography. Around 240 BCE, the scholar Eratosthenes calculated the circumference of the Earth using shadows and geometry — and his estimate was remarkably close to the actual figure. The Greek astronomer Ptolemy later created a **coordinate** system of latitude and longitude that is still used today, over 1,800 years later.

The Golden Age of Islamic Cartography

While Europe entered the Middle Ages and much Greek knowledge was lost, Islamic scholars preserved and expanded the science of mapmaking. In the 12th century, the **geographer** al-Idrisi created what is considered the most accurate world map of the medieval period. Working in Sicily, he compiled information from travellers, merchants, and sailors to produce a detailed map that included Africa, Asia, and Europe with remarkable **precision**. His work influenced European mapmakers for centuries.

Maps and the Age of Exploration

In the 15th and 16th centuries, maps became essential tools for European **exploration**. Portuguese and Spanish sailors used increasingly accurate sea charts to navigate the Atlantic and Indian Oceans, opening new trade routes and connecting continents that had been isolated from each other for thousands of years. Christopher Columbus carried maps that showed the Atlantic as much narrower than it actually is — an error that accidentally led him to the Americas.

Maps were not **neutral** documents, however. They were tools of power. European mapmakers placed Europe at the centre of the world and drew the continents in proportions that made Europe appear larger than it really is — a distortion that still influences how many people visualise the world today. Maps decided who owned land, where **borders** were drawn, and which peoples were included or excluded from official records. To control the map was, in many ways, to control reality.

The Digital Revolution

The invention of **satellite** technology in the 20th century transformed maps forever. GPS — the Global Positioning System — uses a network of satellites orbiting the Earth to calculate your exact position within a few metres. Combined with digital mapping software, this technology has made paper maps almost **obsolete** for everyday use.

But digital maps do far more than replace paper ones. They show real-time data — traffic, weather, public transport schedules — and they learn from your behaviour to suggest personalised routes. Emergency services use digital mapping to locate people in danger. Scientists use satellite maps to track **deforestation**, monitor natural disasters, and study climate change. The humble map has evolved from scratches on a cave wall to one of the most powerful tools of the digital age.

The history of maps is, in many ways, the history of human **curiosity**. Every map ever drawn began with the same fundamental question: *What is out there?* From Babylonian clay tablets to the satellite images on your phone, maps represent our endless desire to understand the world around us — and our extraordinary ability to turn that understanding into action.

3 Key Vocabulary

Word / Phrase	Definition	Example Sentence
technology	the application of scientific knowledge for practical purposes	Map technology has evolved from clay tablets to satellites.
valuable	worth a lot of money or extremely useful and important	Maps were among the most valuable objects in ancient times.
tablet	a flat piece of stone or clay used for writing or carving	The oldest known map is on a clay tablet from Babylon.
entire	whole; complete; with nothing missing	The Babylonian map tried to show the entire known world.
contributions	important additions to knowledge or progress	The ancient Greeks made enormous contributions to cartography.
coordinate	a set of numbers used to show an exact position on a map	Ptolemy created the coordinate system of latitude and longitude.
geographer	a person who studies the Earth's surface and features	Al-Idrisi was a brilliant geographer who worked in Sicily.
precision	the quality of being exact and accurate	Al-Idrisi's map showed the world with remarkable precision.
exploration	travelling to unknown places to discover new things	Maps were essential tools during the Age of Exploration.

Word / Phrase	Definition	Example Sentence
neutral	not supporting any side; fair and unbiased	Maps were never truly neutral — they reflected power and politics.
borders	lines that separate countries or regions from each other	Maps decided where borders were drawn between nations.
satellite	an object sent into space to orbit the Earth	GPS uses satellites to calculate your exact position.
obsolete	no longer used because something better exists	Digital maps have made paper maps almost obsolete.
deforestation	the cutting down of large areas of forest	Scientists use satellite maps to track deforestation worldwide.
curiosity	a strong desire to know or learn about something	The history of maps is the history of human curiosity.

4 Useful Collocations

world map · ancient civilisation · trade route · sea voyage · compass direction · GPS navigation · satellite image · coordinate system · digital mapping · climate change · historical document · political power · geographical knowledge · natural disaster · paper map · explore the world

5 Reading Comprehension

1. How old is the oldest known world map?
 a) About 500 years
 b) About 1,000 years
c) About 2,600 years ✓
 d) About 14,000 years

2. What remarkable achievement did Eratosthenes accomplish?
 a) He drew the first sea chart
b) He calculated the circumference of the Earth ✓
 c) He invented the compass
 d) He sailed around the world

3. Why was al-Idrisi's map so significant?

- a) It was the first map to include America
- b) It was the most accurate world map of the medieval period ✓**
- c) It was made entirely of gold
- d) It was the first digital map

4. Why does the text say maps were 'tools of power'?

- a) Because only kings could read them
- b) Because they decided borders, ownership, and how the world was visualised ✓**
- c) Because maps were used as weapons in battle
- d) Because maps were too expensive for ordinary people

5. What has GPS technology done to paper maps?

- a) Made them more popular
- b) Made them more expensive
- c) Made them almost obsolete for everyday use ✓**
- d) Made them illegal in some countries

6. What question connects all maps throughout history?

- a) How much does this land cost?
- b) Who lives here?
- c) What is out there? ✓**
- d) How old is the Earth?

6 Vocabulary Exercise — Fill in the Blanks

Complete the sentences with the correct word from the box:

technology · contributions · precision · exploration · neutral · borders · obsolete · curiosity

1. Map _____ has evolved from scratches on cave walls to satellite images.
2. The ancient Greeks made enormous _____ to the science of cartography.
3. Al-Idrisi's map showed Africa, Asia, and Europe with remarkable _____.
4. Maps were essential tools during the European Age of _____.
5. Maps were never truly _____ — they were used as tools of political power.
6. Maps decided where _____ were drawn between countries and empires.

7. Digital navigation has made paper maps almost _____ for daily use.
8. Every map ever drawn began with the same human _____ about the world.

7 Answer Key

■ Vocabulary Exercise Answers

1. technology
2. contributions
3. precision
4. Exploration
5. neutral
6. borders
7. obsolete
8. curiosity

8 Speaking & Writing Tasks

■ Speaking Task: Discussion

Discuss these questions with a partner or your teacher:

- Could you survive a week without GPS or digital maps? How would you navigate?
- Do you think the way maps are drawn influences how people see the world?
- What would explorers from 500 years ago think about Google Maps?
- If you could explore any unmapped place on Earth, where would you go?

■ Useful Phrases for Talking About History and Change

- **Throughout history**, maps have shaped how people understand the world.
- **It was not until** the 15th century that Europeans began exploring the Atlantic.
- **What is remarkable is that** Eratosthenes calculated the Earth's size over 2,000 years ago.
- **Over time**, maps evolved from simple drawings to powerful digital tools.
- **The most significant change was** the invention of satellite-based GPS navigation.

 **Writing Task: A Journey Without Maps**

Write a paragraph (120–160 words) about this topic:

"Imagine you had to travel to a new city without any maps, GPS, or phone. How would you find your way? What challenges would you face? What would you learn from the experience?"

Use vocabulary from this lesson. Be creative and think about how different life would be without modern navigation technology.