Teacher Resource

Map Future

Episode 29
22nd October 2019

Focus Questions

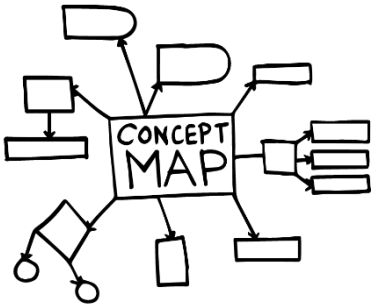
1. Briefly summarise the BTN *Map Future* story.
2. What is the purpose of a map?
3. Maps are created by people called _____.
4. Before computers, how were maps made?
5. What does GPS stand for?
6. How did GPS change the way we use maps?
7. What is a topographical map?
8. Finish the following sentence: Geoscience Australia has decided to stop printing…
9. Why are some people not happy with the decision?
10. When do you use maps? Give examples.

Activity

Class discussion

Before watching the BTN *Map Future* story hold a class discussion to find out what your students know about maps.

- What is a map?
- What is the purpose of a map?
- When do you use maps?
- Make a list of words that relate to maps. Make your own classroom glossary after watching the BTN *Map Future* story.



Activity

What do you see, think and wonder?

After watching the BTN *Map Future* story, respond to the following questions:

- What did you SEE in this video?
- What did you LEARN from this story?
- What was SURPRISING about this story?
- What QUESTIONS do you have about this story?

Key Learning

Students will explore the history of cartography. Students will represent data in the form of a map.

Curriculum

HASS – Years 5 & 6
Locate and collect relevant information and data from primary sources and secondary sources.

Organise and represent data in a range of formats including tables, graphs and large- and small-scale maps, using discipline-appropriate conventions.

Interpret data and information displayed in a range of formats to identify, describe and compare distributions, patterns and trends, and to infer relationships.

HASS – Year 7
Organise, categorise and represent data in a range of appropriate formats using discipline-specific conventions, including different types of graphs, tables, field sketches and annotated diagrams, and maps at different scales.

Interpret and analyse data and information displayed in a range of formats to identify and propose explanations for distributions, patterns, trends and relationships.

Activity

Glossary

Students will develop a glossary of words and terms that relate to maps in the context of the BTN *Map Future* story. Below are some words to get them started. Students will add words and meanings to their glossary as they come across unfamiliar words throughout their research. Students will then write their own sentence using each of the terms.

	Meaning	Sentence
Cartographer		
Scale		
Topography		
Legend		
GPS		
Contour lines		
Longitude and latitude		

Activity

KWLH

Discuss the BTN *Map Future* story as a class. What questions were raised in the discussion and what are the gaps in their knowledge? The following KWLH organiser provides students with a framework to explore their knowledge on this topic and consider what they would like to know and learn.

What do I know?	***What do I want to know?***	***What have I learnt?***	***How will I find out?***

Topic for inquiry

Students will start to think like a cartographer and develop their own question/s for inquiry, collecting and recording information from a wide variety of sources. Students may develop their own question for inquiry or select one or more of the questions below.

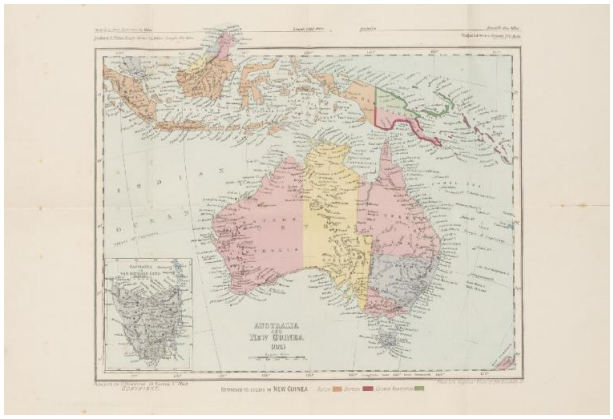
- Explore the history of maps using a timeline to record your results. Include some of the earliest maps of the world and compare to modern maps of the world. How are they similar and different?
- How has technology changed map making? Investigate how maps were made many years ago compared to maps that are made now.
- How does Global Positioning System (GPS) work? Explain how navigation satellites help us figure out where we are and how we get to other places.
- How is GPS used in everyday life? Include how GPS can help monitor extreme weather events. Give examples.

Activity

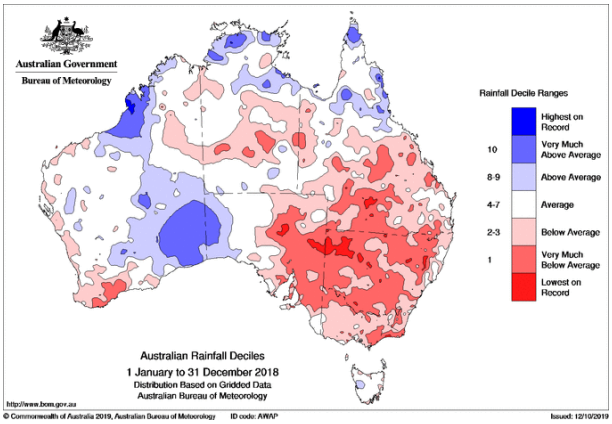
Visual literacy

In this activity students will observe, analyse and query a range of maps. Below is a selection of maps for students to observe and respond to. Alternatively, students can visit the maps collection on the National Library of Australia website and choose a map that interests them. Students will observe, analyse and query the map/s and respond to the following questions:

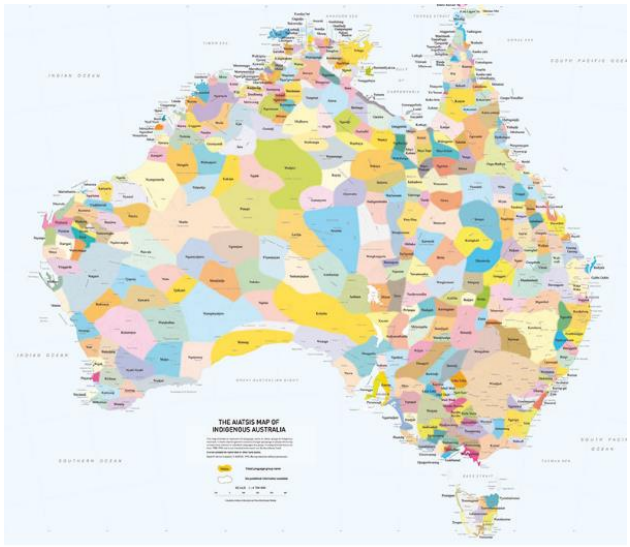
- What is the title of the map?
- When was the map produced?
- Who produced the map?
- How do you think it was made?
- What features do you see on this map? Make a list.
- What is the purpose of the map?
- What geographical questions do you have about the map?



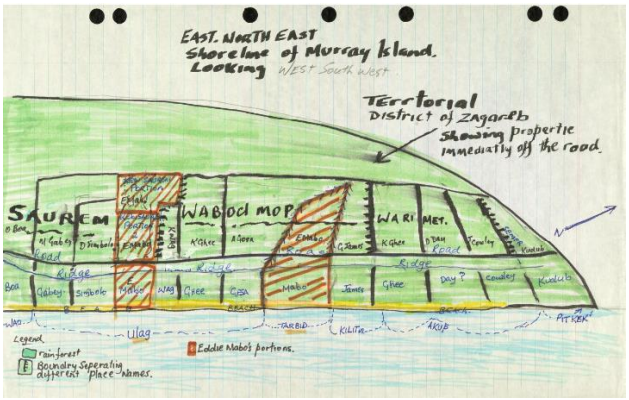
Australia and New Guinea 1885, National Library of Australia



Australian Rainfall Deciles 2018, Bureau of Meteorology



Map of Indigenous Australia, AIATSIS



Eddie Mabo's map, National Library of Australia

Activity

Create a map

Provide students with the opportunity to think and behave like cartographers (someone who makes maps). In this activity students will be given the mission to map their classroom or school grounds, identify a range of geographical features and construct a map.

Students may work individually or in small groups and will use the following as a guide:

- What tools and materials will you need to construct your map?
- Decide what the purpose of your map will be and how it will be useful to people.
- What objects or geographical features will you include in your map?
- How will you figure out what scale to use?
- Consider including contour lines on your map to show the shape of things (like hills).
- Consider including a grid on your map which will help people locate specific places.
- Include a title, north arrow, symbols and scale on your map.

Students will reflect on the activity by responding to one or more of the following questions:

- What did you enjoy about the map making process?
- Compare and contrast your map with that of your classmates. What is similar or different?
- What did you find surprising?
- What would you do differently next time?

Useful Websites

Modern Maps – BTN
https://www.abc.net.au/btn/classroom/modern-maps/10532294

Map of Indigenous Australia – AIATSIS
https://aiatsis.gov.au/explore/articles/aiatsis-map-indigenous-australia

Maps of Australia – Geoscience Australia
https://www.ga.gov.au/data-pubs/maps

Maps, location and direction – ABC Education
http://education.abc.net.au/home#!/topic/495424/maps-location-and-direction

How does GPS work? – NASA Space Place
https://spaceplace.nasa.gov/gps/en/