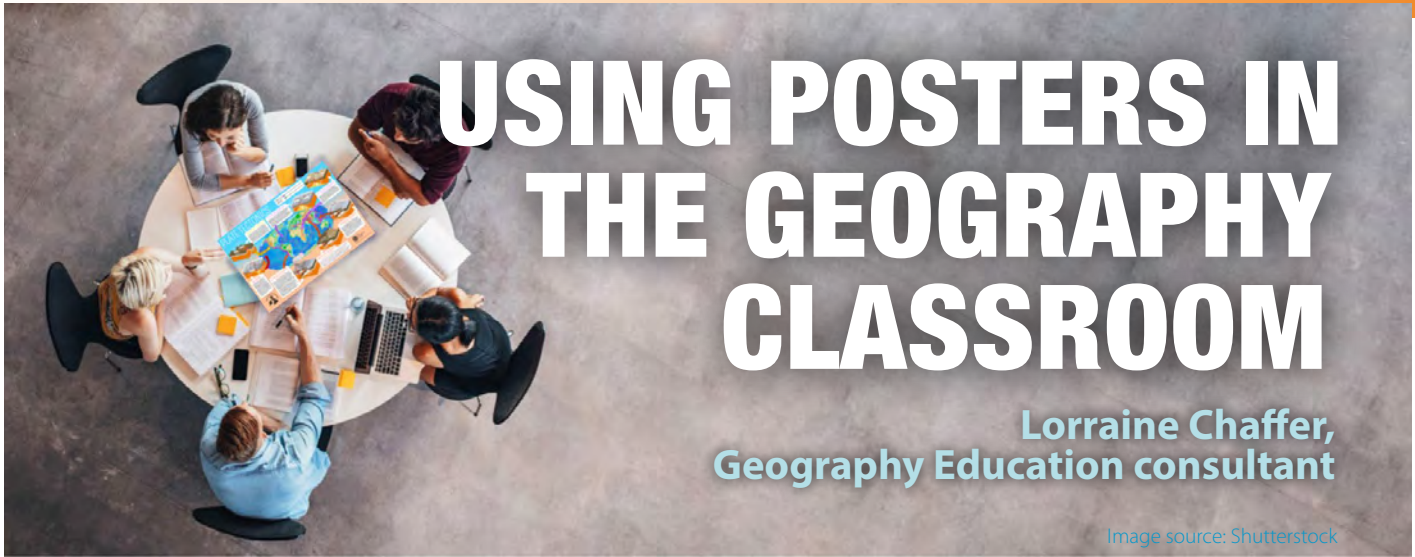


GEOGRAPHICAL INQUIRY



USING POSTERS IN THE GEOGRAPHY CLASSROOM

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Image source: Shutterstock

Posters can be used as a basis for individual or group inquiry activities for most Geography topics using some creativity and planning. The activities included here focus on Oceans and Asia.

HOW WELL DO YOU KNOW EARTH'S SURFACE?

Use the Earth's Surface poster for the following groupwork. This groupwork could be completed in many topics including Landscapes and Landforms, Water in the World, Sustainable Biomes and Environmental Change and Management.

Activities: Oceans and Earth's surface

Students work in groups or individually to complete the following activities.

Each group will need access to a poster.

1. Begin with these thinking questions:

- Will the proportion of Earth covered by oceans increase or decrease with climate change?
- What might Australia's proportion of earth's surface be as a result of a global 1 metre rise in sea level?
- Why is Antarctica and not the Arctic shown on the graphic as a portion of Earth's surface?

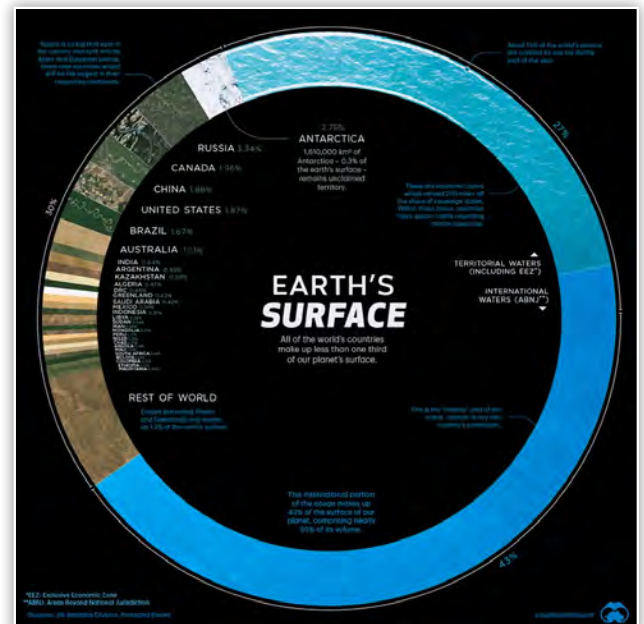
Discuss as a group and then share ideas in a full class discussion.

2. In your group try these prediction activities

A. Predict how the graphic depicted would change with a 1 metre rise in sea level.

B. Predict how the graphic depicted would be different by 2100 due to climate change impacts on weather and climate.

- Create a hand drawn simplified infographic to illustrate your predictions.
- Conduct an inquiry to determine the accuracy of your predictions.



Posters available from GTA NSW& ACT Website – Resources tab

3. Find two sources that will validate the data shown in the infographic.
4. Calculate the % of Earth's surface occupied by China PLUS India. Compare this to the % occupied by the Earth's oceans.
5. Explain the difference between Territorial Waters and International Waters.
6. What message is the following quote giving?
'A country is not measured by the size of its area on the map. A country is truly measured by its heritage and culture.'

Linked article at <https://www.visualcapitalist.com/countries-by-share-of-earths-surface/>

LANDFORMS and LANDSCAPES

SYLLABUS LINK:

Geomorphic processes that create landforms: tectonic activity

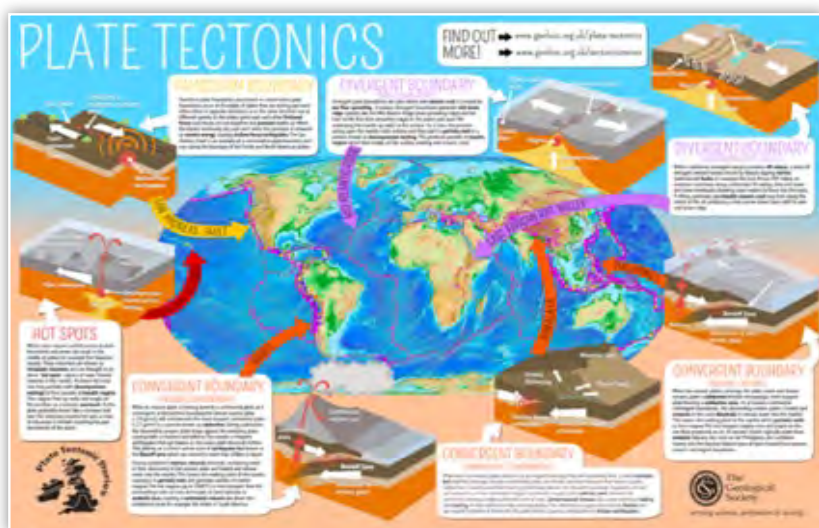
Elective Geography: Oceanography

Use the 'Plate Tectonics' poster to complete the following activities

This activity would be timed to take place AFTER explaining geomorphic processes linked to plate tectonics or when integrating the Asia Cross Curriculum Priority.

Activities: Plate tectonics and Oceans

Each group will need a poster.



1. Identify one of the three largest oceans on the poster. Circle with a red whiteboard marker ONE of these oceans. This ocean will be the focus of your investigation.
2. Describe the location of your selected ocean using geographical terms such as latitude, longitude, hemisphere, direction e.g., from Australia.
3. Name and locate at least 6 countries that border this ocean.
You may use a map showing countries of the world for activities 2 and 3.
4. Identify the different plate boundaries located in your selected ocean and describe in your own words what is happening at each boundary.
5. Identify any landform features in the ocean that would be located on any plate boundaries in this ocean. Explain the cause of any feature you have named.
6. Are there any geomorphic hazards that could impact on this ocean as a result of plate tectonics? Explain the cause of any hazard you have named.
7. Compare and contrast what is happening in your selected ocean with ONE other ocean.
8. Predict geomorphic changes that could occur within your ocean over the next 100 years. Justify your prediction using your geographical knowledge and understanding of plate tectonics.
9. Reflect on what you have learned in this activity. Create a catchy title or name to summarise the feelings of your group about plate tectonics in our oceans.

Activities: Plate tectonics in Asia

1. Identify the location of Asia on the poster. Circle with a red whiteboard marker. This is your Asian Circle for the following activities. *Let students debate where this circle should be drawn and reach a consensus.*
2. Describe the location of your Asian Circle using geographical terms such as latitude, longitude, hemisphere, direction e.g., from Australia.
3. Name and locate at least SIX Asian countries within the circle you have drawn. *You may use a map showing countries of the world for activities 2 and 3.*
4. Identify the different plate boundaries located in your Asian Circle and describe in your own words what is happening at each boundary.
5. Identify any landform features or hazards within your Asian Circle that result from these tectonics movements. Explain the cause of each feature you have named.
6. Compare and contrast what is happening in your Asian Circle with at least three other parts of the world, including Australia. (refer to countries or continents).
7. Predict geomorphic changes that could occur within your Asian Circle over the next 100 years. Justify your prediction using your geographical knowledge and understanding of plate tectonics.
8. Reflect on what you have learned in this activity. Create a catchy title or name to summarise the feelings of your group about plate tectonics in your Asian Circle.

ENVIRONMENTAL CHANGE

SYLLABUS LINKS

Investigate human-induced environmental changes across a range of scales, for example: brief examination of types, and extent, of environmental change

Activities: Biodiversity loss in the world's oceans?

Use the 'On the Brink' poster to complete the following activities

Each group will need a poster.

1. Use the poster to rank the five causes of global biodiversity loss from largest to smallest contribution.
2. In groups, use your knowledge about world **oceans** only to rank what you believe are the 5 causes of biodiversity loss in marine environments - from largest to smallest impact.

Discuss group rankings as a class.

3. Select ONE cause of biodiversity loss to investigate. Focus your research on ONE ocean.

Find facts, statistics, and information about specific places. For example:

- Climate change and biodiversity loss in the Arctic Ocean.
- The impact of pollution on biodiversity in the Pacific Ocean

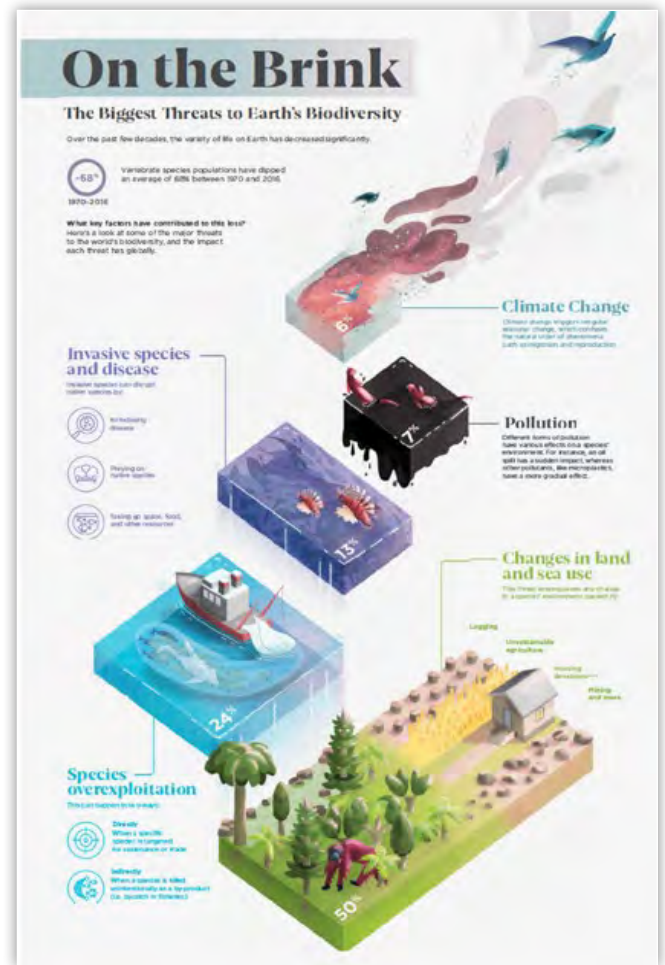
Create a media report to present your findings. Include images / artwork, facts, statistics and places.

4. Find a relevant video clip or article that you can embed into your report
5. Share your report with the class
6. After all groups have presented their research findings, discuss the response to Question 2 again to see if opinions have changed.

Activities: Biodiversity loss in the Asia Pacific

Study the poster On the Brink. The biggest threats to Earth's biodiversity.

1. As a group discuss the area of the world known as the Asia Pacific. Create a definition of the region. *You can use a map showing countries of the world for this activity if needed.*
2. Estimate the % contribution of the Asia Pacific to global losses in biodiversity.
3. Use the poster to rank the FIVE causes of global biodiversity loss from largest to smallest contribution.
4. Use your knowledge about the Asia Pacific Region to rank what your group believe are the FIVE causes of



biodiversity loss for the region in order from largest to smallest.

5. Use the QR code on the poster or the following weblink to check your group's estimates in Activity 2 and ranking for Activity 4. Visualising the biggest threats to Earth's biodiversity. <https://www.visualcapitalist.com/biggest-threats-to-earths-biodiversity/>
6. How accurate were your estimates? Calculate the % difference between your answers to Activities 2 and 4 and the information in the article. Suggest reasons for the differences.
7. Select **ONE Asian country** to research biodiversity loss. Summarise your findings using the FIVE causes of biodiversity loss as headings. Create an infographic of your own using the following title: *On the Brink: The biggest threats to 's (name of country) biodiversity loss.* Include images / artwork and a brief summary of your findings for each cause. Add a conclusion at the beginning or the end of the infographic.

INTERCONNECTIONS

SYLLABUS LINKS

Investigate the ways places and people are interconnected through trade in goods and services across a range of scales, for example:

- examination of a country's trade links with other countries e.g., sources of raw materials
- analysis of spatial patterns of global trade e.g., countries of production and consumption

Investigate the effects of the production and consumption of goods on people, places and environments throughout the world, for example:

- assessment of the effect of production or consumption of goods on ONE place or environment

Activities: Mobile phones and ocean trade

- Your Nokia mobile phone is being produced in Finland.
 - What is the most likely way you will transport the minerals you need to the processing factory? Justify your choice. Options include air freight, land freight, shipping container, bulk shipping)
 - On a blank map of the world draw arrows to show the main trade routes used to transport the minerals by sea from a country of origin to your destination.
 - Circle potential 'Choke points' in the routes you have shown.
 - Identify other potential threats to the delivery of your minerals by sea.



Nokia headquarters Espoo, Finland Source: <https://www.flickr.com/photos/pikkuanna/5754189284/>. CC BY-SA 2.0, <https://commons.wikimedia.org/w/index.php?curid=64791586>



Multiple posters can be purchased by following this link: https://www.gtansw.org.au/wp-content/uploads/2021/03/Posters-for-sale_amended-postage_11.03.21.pdf

Activities: How does your mobile phone connect you to Asia?

- Identify the location of Asia on the poster. Circle with a red whiteboard marker. This is your Asian Circle for the following activities.
- Describe the location of your Asian Circle using Geographical terms such as latitude, longitude, hemisphere, direction e.g., from Australia.
- Name and locate at least SIX Asian countries within the circle you have drawn. *You may use a map showing countries of the world for this activity.*
- Identify the smartphone minerals mined in Asia and the countries of production.
- As a group, discuss where you think most smartphones in the world are produced. List your group prediction of the THREE top smartphone producing countries and justify these choices.
- Check the accuracy of your answer to Question 5 by researching the main locations where smartphones are produced. Conduct further research to explain the locations of smartphone production. The following website is a good starting point. *List of Top mobile manufacturing countries in the world* <https://www.jagranjosh.com/general-knowledge/list-of-top-mobile-manufacturing-countries-in-the-world-1594643135-1>
- Map the flow of smartphone minerals to the top producing country from one other location for each mineral needed to produce smartphones. Name the selected production site for each mineral and the destination country i.e., the top smartphone producer. *Use a blank world map.*
- Investigate the effects of mobile phone production. Refer to at least on one country from Asia in your response.

CREATING CLASSROOM WORKSTATIONS

Creating workstations around a classroom can put students in charge of their learning and promote independent thinking and teamwork skills ... and get students moving. After *'being a student for one day'* and following a timetable in which every lesson had students seated at their desk made me more determined to increase the number of lessons that encouraged student movement and responsibility for learning.

Workstations

Workstations can be **wall displays** including posters and /or images or **sit at / stand around stations on desks** with a diversity of resources to investigate. Wall displays work best when students are given opportunities to interact with the content and link to the topics that are being studied. Static displays can make your classroom Geographical and an attractive learning environment but do not always engage all students. Displays should be changed for each new topic.

For this activity, I have used **posters** that are on sale on the GTA NSW & ACT website to show how poster displays can be used to put a **focus on Oceans and Asia**. For some activities students may need access to a map showing countries of the world. A1-page printed world map or a large world map on the classroom wall works well for this

Note: If posters are laminated, whiteboard markers can be used by the teacher OR students to create the focus of a lesson. Give one student in each team responsibility for drawing on your posters. I would use multiple copies of a single poster rather than a variety of different stimulus materials for Stage 4.

Differentiation

For students working at Stage 5 level or higher, posters could be used as a stimulus for a deeper, independent investigation or an additional early finishers station created to challenge these talented students.

Removable QR Code

QR codes can make workstation activities more sophisticated, integrate technology and add an element of fun. QR codes can be used as a way of engaging students with classroom displays. While not all schools allow phones in classrooms or have 1:1 with tablets, activities can be used with class tablets at each station. By making QR codes **removable** you can create different activities as post topic revision or formative assessment and protect your posters.

Getting started with QR codes

1. Google "free QR code generator" to find a website to create your codes.



2. Ask students to load a free QR Code reader app onto their phones or tablet devices – or the teacher does if using class tablets.
3. Generate QR codes that link to questions, videos, websites or information sheets about the topic or theme.
4. Print poster-size codes to use on posters or images on display.
5. Make worksheets live by adding QR codes that take students off the page and onto a relevant website, interactive game or video.
6. Create a fast-fininishers area in the classroom where QR codes reveal an extension activity or analytical questions.
7. Use a QR code generator and a **3D QR Code Activity Cube Template** to create QR code cubes. Each code can reveal a different question or activity.

In the previous poster activities, questions could be added to a QR cube using categories such as:

- Locate
- Identify and describe
- Identify and explain
- Compare and contrast
- Predict and justify
- Reflect and create

Each workstation could focus on one activity from the cube with students rotating around the room. For static stations students can work through the activities on each side of the cube.

Sources

10 Exciting QR Code Classroom Activity Ideas
<https://www.teachstarter.com/au/blog/10-exciting-qr-code-activity-ideas-for-classroom/>

One way of creating 'removable' QR code stickers for your posters is described here: <https://gymcraftlaundry.com/diy-peel-and-stick-removable-labels-free-printable/>

Blank QR Code Activity Cube Template
<https://www.teachstarter.com/au/teaching-resource/blank-qr-code-activity-cube-template/>

Mobile Connections is a Geography teaching and learning program in the Interconnections content area. It allows students to look at their personal connections to mobile technology and the impact it has on society, the economy and the environment.

MOBILE CONNECTIONS

Education Resources

- Curriculum Unit
- Animations & Interactives
- Digital Book
- Teacher Professional Learning



Download the free education resources at mobilemuster.com.au



