

MODULE 6. MAP YOUR MOBILE



LESSON OBJECTIVE

In this module students will appreciate that there are many different materials that come from all over the world to make mobile phones.

AUSTRALIAN CURRICULUM CONTENT DESCRIPTION

YEAR 6 GEOGRAPHY

- The effects that people's connections with, and proximity to, places throughout the world have on shaping their awareness and opinion of those places ([ACHGK036](#))
- Collect and record relevant geographical data and information, using ethical protocols, from primary and secondary sources, for example, people, maps, plans, photographs, satellite images, statistical sources and reports ([ACHGS041](#))
- Present findings and ideas in a range of communication forms, for example, written, oral, graphic, tabular, visual and maps, using geographical terminology and digital technologies as appropriate ([ACHGS045](#))
- Reflect on their learning to propose individual and collective action in response to a contemporary geographical challenge and describe the expected effects of their proposal on different groups of people ([ACHGS046](#))

LESSON OUTLINE

1. Students read the Fact Sheet: [Mobile Phone Resources from Around the World](#) and identify key points from within the text.

2. Using the IWB and Game: [Mobile Phone Resources Map](#) undertake the following activities:
 - a. Identify the countries mentioned in the Fact Sheet.
 - b. Ask students to connect (drag and drop) the raw materials to the country that supply those natural resources.
 - c. Ask students if they recognise any of the raw materials and click on each material to read through a brief description.
 - d. Discuss how the materials for making a mobile phone need to be transported around the world. What impact does this have on the environment?
3. Students write a letter from the perspective of a child their age, who lives in one of the countries discussed throughout the lesson. They should research the mining activity and focus on interpreting the following questions:
 - a. What effect does mining the raw material have on the environment of that country?
 - b. How does the mining of the raw material affect the people of that country?
 - c. What are the potential negative environmental impacts of mining?
 - d. What are the economic and social benefits of mining?
 - e. Why is it important to mine in a sustainable way? Older grade students should answer in terms of:
 - i. Economic sustainability - ensuring the operation makes enough money to be profitable and that the community benefits through employment, business opportunities and improvements to local infrastructure such as roads, housing and schools.

- ii. Environmental sustainability – ensuring that the air, energy, land, waste and water aspects of the operation are managed safely and that once mining is finished, the land can have future uses.
 - iii. Social sustainability – ensuring the health, safety and well-being of employees working on site and making sure members of the local community are informed and engaged in the process in an appropriate manner.
4. One of the ways to reduce the amount of raw material being mined is to recycle mobile phones. The materials extracted from the recycling process can be reused which reduces the demand for these materials. Discuss.
 5. Share your student work and upload the letters to the [MusterKids Zone](#) section on the MobileMuster website.

RESOURCES

1. Interactive whiteboard (IWB)
2. Fact Sheet: [Mobile Phone Resources from Around the World](#)
3. Game: [Mobile Phone Resources Map](#)

SUPPORT MATERIAL

- [Mining Lesson Plans and Fact Sheets](#) (Oresome Resources)
- [Envirosmart](#): includes lessons on why we mine and how we mine (Mineral Council of Australia)
- Video: [GSM Association Mobile Phone Lifecycle](#)
- GSM Association, [Mobile Phone Life Cycles: Use, Take-Back, Re-use and Recycle](#)



EXTENSION ACTIVITIES

Watch the Video: [Nokia: 10 Years of Eco Innovation](#) as an example of how manufacturers are becoming more innovative and sustainable. Student can investigate the concept of sustainability and critically look at the mobile phone manufacturing process to answer the following questions:

1. Is there a better way to make mobile phones?
2. And if so what might be the costs?
3. What might be the improvements?
4. How does the MobileMuster program improve the process?