

MODULE 8. FROM WASTE TO RESOURCE



LESSON OBJECTIVE

In this module students will appreciate the resources that can be recovered from mobile phones. Students will interpret data from the MobileMuster program and undertake purposeful investigations when interpreting and analysing the data.

AUSTRALIAN CURRICULUM CONTENT DESCRIPTION

YEAR 5 MATHEMATICS:

- Pose questions and collect categorical or numerical data by observation or survey ([ACMSP118](#))
- Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies ([ACMSP119](#))
- Describe and interpret different data sets in context ([ACMSP120](#))

YEAR 6 MATHEMATICS

- Interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables ([ACMSP147](#))
- Interpret secondary data presented in digital media and elsewhere ([ACMSP148](#))

YEAR 5 SCIENCE:

- Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena ([ACSHE081](#))
- Scientific knowledge is used to inform personal and community decisions ([ACSHE217](#))
- Use equipment and materials safely, identifying potential risks ([AC SIS088](#))

YEAR 6 SCIENCE

- Electrical circuits provide a means of transferring and transforming electricity ([ACSSU097](#))
- Energy from a variety of sources can be used to generate electricity ([ACSSU219](#))
- Science involves testing predictions by gathering data and using evidence to develop explanations of events and phenomena ([ACSHE098](#))
- Scientific knowledge is used to inform personal and community decisions ([ACSHE220](#))
- Use equipment and materials safely, identifying potential risks ([AC SIS105](#))



LESSON OUTLINE

1. Watch the [MobileMuster Recycling Program video](#) and ask the students to keep a record of what products are made out of old mobile phones.
2. Using the MobileMuster Resource Recovery Calculator complete the Worksheet: [Mobile Phone Recycling](#).
 - a. Divide the class into small groups and ask each group to choose a product that is made out of recycled mobile phones.
 - b. Using the Factsheet as a start students need to research their product, how it is made and what are the environmental benefits of the product.
3. Discuss these questions after activity:
 - a. Why is it important to recover resources from old mobile phones?
 - b. How can recycling mobile phones help the environment?
 - c. What would happen if mobile phones were not recycled? Where would the materials come from?

RESOURCES

1. Interactive whiteboard (IWB)
2. Fact Sheet: [End Products of Recycling Mobiles](#)
3. Video: [MobileMuster Recycling Program](#) (3:13 minutes)
4. Worksheet: [Mobile Phone Recycling](#)
5. Game: [Resource Recovery Calculator](#)

SUPPORT MATERIAL

- [Nokia: 10 Years of Eco Innovation](#)
- [GSM Association Mobile Phone Lifecycle](#)

EXTENSION ACTIVITIES

Using the MobileMuster [Resource Recovery Calculator](#) students can calculate the number of mobile phones that would need to be recycled to create some of the everyday items that they use at school or home. Create posters displaying the end products that can be recovered by recycling mobile phones around your classroom or school.