

The rising impacts of e-waste

Year level

Lower secondary,

Lesson description

Students will know what the circular economy is and how it applies to waste. Students will explore the impacts of e-waste considering the social, economic and environmental aspects of e-waste and the linear economy model.

Consider the following lesson description: Students will explore the current e-waste crisis and the linear economy model. Students will understand the social, economic and environmental impact of e-waste and, how the circular economy maximises waste reduction and sustainability outcomes for e-waste.

Curriculum links

Year 9 and 10

V 9 Analyse how people in design and technologies occupations consider ethical, security and sustainability factors to innovate and improve products. Analyse how people in design and technologies occupations consider ethical, security and sustainability factors to innovate and improve products, services and environments (*Design and Technology - AC9TDE10K01*)

V 9 Analyse the impact of innovation, enterprise and emerging technologies on designed solutions for global preferred futures (*Design and Technologies - AC9TDE10K02*) and services and environments (*Design and Technologies - AC9TDE10K01*)

V 9 Analyse the impact of innovation, enterprise and emerging technologies on designed solutions for global preferred futures (*Design and Technologies - AC9TDE10K02*).

V 9 Develop and modify questions to investigate a contemporary economic and business issue (*Economics and Business - AC9HE9S01*).

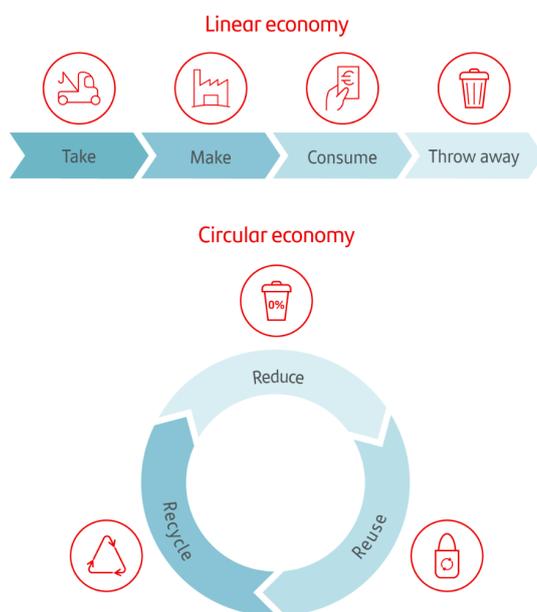
V 9 Locate, select and analyse information and data from a range of sources (*Economics and Business - AC9HE9S02*).

Materials

- Internet access

Procedure

- Watch the following video: [The e-waste crisis](#)
- Ask the students to examine the following diagram:



Have the students read [E-waste in Brisbane](#).

Discuss the following points as a group:

- What is e-waste?
- Why is it important to keep batteries or electronic products out of the bin?
- How many devices do you have in your home? Consider how many of these devices did not exist 30 years ago
- What happens to devices at the end of life at home? Is it circular or linear?
- Which is more sustainable and why?

Ask the students to consider one device that they have at home. Have them research and write down the extra steps that they can take to keep that device out of landfill when it is not working optimally or not working at all. What are the sustainable benefits of doing this?

Extension activities

Book an excursion to the [Towards Zero Waste Education Centre](#) at Brisbane Landfill to receive a waste education presentation with Brisbane City Council and tour of the landfill. This will give students the opportunity to learn more about moving towards zero waste, waste minimisation and landfill operations. Teachers can opt to include an e-waste and circular economy presentation.

Have students research the closest place they can drop off mobiles, chargers and accessories via [MobileMuster](#). There are also other educational resources on this site.

Lesson plan: The rising impacts of e-waste

