

# WASTE NOT, WANT NOT:



Creating a Circular Economy

#### **YEAR RECOMMENDATION: 9-12**

Friday, 23 March 2018 10.00 am-11.00 am

Waste Not, Want Not: Creating a Circular Economy at the World Science Festival Brisbane can provide Year 9-12 with valuable curriculum links and a unique classroom learning experience.

The Queensland Museum acknowledges the expertise and support of the Department of Education in developing these curriculum links.

#### **Year 4-12 Curriculum Links**

### **Links with Cross-Curriculum Priorities**

## Sustainability

 OI.9 Sustainable futures result from actions designed to preserve and/or restore the quality and uniqueness of environments.

## Links with General Capabilities

## Literacy

#### Grammar knowledge

Express opinion and point of view - use language that indirectly expresses opinions and constructs representations of people and events, and consider expressed and implied judgments

#### Information and Communication Technology (ICT) Capability

Identify the impacts of ICT in society - assess the impact of ICT in the workplace and in society, and speculate on its role in the future and how they can influence its use

## Personal and Social Capability

Engage in science inquiry, learn how scientific knowledge informs and is applied in their daily lives, and explore how scientific debate provides a means of contributing to their communities

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The possible curriculum links between Waste Not, Want Not: Creating a Circular Economy and the Australian Curriculum are described in the table below. The applicable Achievement Standard (relevant section bolded), content descriptions and C2C units have been outlined for Years 4-12

## **Australian Curriculum: Humanities and Social Sciences**

Year	Achievement Standard	Content descriptions	Curriculum into the Classroom
4 HASS	Students recognise the importance of the environment and identify different possible responses to a geographical challenge	Knowledge and Understanding  Geography  The use and management of natural resources and waste, and the different views on how to do this sustainably (ACHASSK090)	Unit 2 HASS  Investigate how people use, and are influenced by, environments and how sustainability is perceived in different ways by different groups and involves careful use of resources and management of waste.

## **Australian Curriculum: Science**

Year	Achievement Standard	Content descriptions	Curriculum into the Classroom
7	By the end of Year 7, students They analyse how the sustainable use of resources depends on the way they are formed and cycle through Earth systems.	Science as a Human Endeavour  Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE120)	Year 7 Unit 1 Water- waste not, want not Year 7 Unit 2 Water- waste not, want not
8	By the end of Year 8, students explain how evidence has led to an improved understanding of a scientific idea and describe situations in which scientists collaborated to generate solutions to contemporary problems. They reflect on implications of these solutions for different groups in society.	Science as a Human Endeavour Use and influence of science Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations (ACSHE135)	Year 8 Unit 5 Energy in my life & 6 What's up
9	By the end of Year 9, students They analyse how biological systems function and respond to external changes with reference to interdependencies, energy transfers and flows of matter. They describe social and technological factors that have influenced scientific developments and predict how future applications of science and technology may affect people's lives. Students design questions that can be investigated using a range of inquiry skills.	Science Understanding  Ecosystems consist of communities of interdependent organisms and abiotic components of the environment; matter and energy flow through these systems (ACSSU176)	Year 9 Unit 6 Responding to change
10	Students describe and analyse interactions and cycles within and between Earth's spheres	Science Understanding Global systems, including the carbon cycle, rely on interactions involving the biosphere, lithosphere, hydrosphere and atmosphere (ACSSU189)	Year 10 Unit 7 Global systems

# Senior Syllabus (Years 11-12 Subjects) Curriculum Links Science in Practice

Elective: Resources, energy and sustainability

Solutions to humanity's energy and resource challenges are likely to come from the application of science and technology. Students should develop an awareness of the consequences of using resources by considering their short-term and long-term impacts as well as their sustainability.

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