

# How does an excursion to the Regional Resource Recovery Centre (RRRC) support what you are doing in your classroom?



## Early Childhood

### **Pre-Primary (Science & HASS)**

Do you sort your rubbish into the right bin? Ever wonder how the plastic, paper and steel gets sorted out? A visit to the RRRC provides an opportunity to answer these questions and ask more! (ACHASSI001) Observe how our Materials Recovery Facility sorts the different materials and participate in a simulation of the sorting process (ACSSU003). When you return to school, spread the Recycle Right message and investigate ways to reduce, reuse and recycle your waste at home (ACHASSI010.)

### **Year 1 (Science & HASS)**

Discover which native animals call the RRRC home, how this place has changed over time and what people can do to support them to thrive and survive (ACSSU211; ACSHE022; ACHASSK031). When you return to school, spread the Recycle Right message and investigate ways to reduce, reuse and recycle your waste at home (ACHASSI027).

### **Year 2 (Science & HASS)**

Talk about how we use Earth's resources to create products such as aluminium cans and glass bottles (ACSSU032). Discover what happens to the co-mingled recycling once it has been separated and how it is recycled into new products (ACSSU031). Discuss how the way people shopped in the past is different to now, and how waste management has had to change to reduce waste sent to landfill (ACHASSK046). After learning how we manage and protect resources through waste reduction and recycling, become conservation champions and spread the Recycle Right message at home and school (ACSHE035; ACHASSI042).

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## Middle to Upper Primary

### Year 3 (Science)

Landfill is a problem, not a solution to waste management. Learn how the Southern Metropolitan Regional Council is diverting over 70% of waste from landfill and how materials can be recycled into new products (ACSSU046; ACSHE051).

### Year 4 (Science & HASS)

The RRRC's Material Recovery Facility is physics in action! Observe how the properties of materials are exploited in order to sort co-mingled recycling and separate compost from inorganic waste (ACSSU074). Explore the environmental consequences of waste management, how the Southern Metropolitan Regional Council works to reduce those impacts and what you can do to help (ACSHE062; ACHASSK090). On your return to school, explore different ways to help spread the messages of the 3Rs and Recycle Right (ACHASSI082; ACHASSI081).

### Year 5 (HASS)

When we throw something away, where exactly is 'away'? A visit to the RRRC will help you to understand the role that waste management groups such as the Southern Metropolitan Regional Council play in the community and ways to reduce the impact of waste on the local place and space (ACHASSK113; ACHASSI102).

### Year 6 (Science)

The RRRC employs billions of micro-organisms that work in our Waste Composting Facility to eliminate odours and to produce our compost. Discover how we maintain the perfect environment for these amazing creatures to survive and thrive (ACSSU094). Then, venture to our Materials Recovery Facility to watch the co-mingled recycling be sorted prior to being recycled into new objects (ACSSU095).

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## Secondary

### **Year 7 (Science)**

The RRRC's Materials Recovery Facility is physics in action! See for yourself the separation techniques we use on a daily basis to sort the aluminium from the paper from the plastic (ACSSU117; ACSSU113; ACSHE121). Learn how recycling allows us to continue to use non-renewable resources, such as metals and plastics (ACSSU116).

### **Year 8 (Geography & Science)**

Waste management is an issue that needs to be addressed when humans live together in large communities. The effects of waste management on the natural environment will be discussed as you view state of the art technology that is reducing this impact (ACHGK051; ACHGK052). View how the Southern Metropolitan Regional Council uses science and technology to provide a solution to the issue of household waste (ACSHE135) and on your return to school, compare these processes to those of developing nations around the world (ACHGK054).

### **Year 9 (Geography & Science)**

In our modern throwaway society and technological age, see firsthand the magnitude of waste being produced. Consider how this compares to natural cycles, where energy and resources flow in and out of ecosystems and how they are replaced to ensure the sustainability of such systems (ACSSU176). Upon returning to school, explore the environmental impacts of the consumer product on the places that produce the raw materials and make the product, and investigate waste management processes in other countries, such as Egypt (ACHGK068).

### **Year 10 (Geography & Science)**

Humans are generating waste at an ever increasing and unsustainable rate. Learn how recycling can reduce the impact of greenhouse gas emissions such as methane and investigate how human consumption and waste production is affecting global systems, including the nitrogen cycle (ACSSU176). Using the Waste Authority's Waste Hierarchy, investigate how change in an urban environment is being managed, and the role that the individual can play (ACHGK070).

### **Senior Secondary**

Year 12 Geography: Investigate how the SMRC has used sustainable planning strategies to manage waste for the south-western metropolitan region of Perth.

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## Sustainability

**All Western Australian Curriculum learning areas have a potential to contribute to the sustainability cross-curriculum priority. While some learning areas do not address sustainability directly in their content descriptions, they may still contribute to learning that is essential for understanding sustainability issues by providing the analytical, measurement and persuasive skills needed to advocate effectively for sustainability.**

A tour of the RRRC addresses many of the Organising Ideas for the cross-curriculum priority of Sustainability Pre-Primary to Year 10.

### Systems

**OI.1** – The biosphere is a dynamic system providing conditions that sustain life on Earth.

**OI.2** – All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival.

### World Views

**OI.5** – World views are formed by experience at personal, local, national, and global levels, and are linked to individual and community actions for sustainability.

### Futures

**OI.6** – The sustainability of ecological, social, and economic systems is achieved through informed individual and community action that values local and global equity and fairness across generations into the future.

**OI.7** – Actions for a more sustainable future reflect values of care, respect, and responsibility, and require us to explore and understand environments.

**OI.8** – Designing actions for sustainability requires evaluation of past practices, the assessment of scientific and technological developments, and balanced judgements based on projected future economic, social, and environmental impacts.

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

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