

WASTE	Waste Audit Lesson Plan - Upper Primary (3-6)
Curriculum Links	<p>Level 3 & 4:</p> <ul style="list-style-type: none"> • Science knowledge helps people to understand the effects of their actions (VCSSU056) • Types of natural vegetation and the significance of vegetation to the environment, the importance of environments to animals and people, and different views on how they can be protected; the use and management of natural resources and waste, and different views on how to do this sustainably (VCGGK082) • Select and trial methods for data collection, including survey questions and recording sheets (VCMSP178) <p>Level 5 & 6:</p> <ul style="list-style-type: none"> • Scientific understandings, discoveries and inventions are used to inform personal and community decisions and to solve problems that directly affect people's lives (VCSSU073)
Students	Approximately 25 students
Duration	90 minutes
Learning Intentions	<ul style="list-style-type: none"> • To determine how much waste our school produces. • To understand the most common types of waste at our school. • To identify what items commonly contaminate different bins and the implications of this. • To consider how we can improve our waste management at school.
Success Criteria	<ul style="list-style-type: none"> • I can explore the waste produced at school and analyse the collected data. • I can discuss collected data and make recommendations to improve waste management at school.
Resources	<p>* Note – Please ask your CERES Facilitator for the Waste and Litter Audit Tool required to complete this learning activity *</p> <ul style="list-style-type: none"> • Unemptied school bins (classroom and outside bins – quantity depending on student numbers and timeframe. • Large tarps (enough for the amount of bins being emptied) • Tongs • Waste/Litter Audit templates (enough for each group and bin emptied) • Scales • Clipboards • Pens/Pencils • Waste items (for Tuning In activity)

- Camera/iPad (if possible) for photos and action planning
- Maps of school

Lesson Overview

Tuning in

(10 minutes)

* Note: If materials not available or time does not permit, watch the [Majestic Plastic Bag Mockumentary](#) and discuss.

Using the CERES Waste Breakdown [activity](#) as a guide, complete a waste breakdown timeline with students to establish context and briefly discuss the importance of waste management using the following prompts:

- What is waste?
- What are the different types of waste?
- How long does it take to break down in a landfill? Does it really break down?
- How does this affect animals, the environment, different community/cultural groups?
- What are the 5R's? Why are they important?

Explicit Instruction

(15 minutes)

Discuss and unpack learning intentions and success criteria.

As a group, discuss what a waste audit is, using the following questions as prompts:

- Why do you think it is important for us to do an audit of the bins in the school?
- Why should we audit the inside bins and the outside bins?
- What do you think we should be looking for?
- How can we sort our waste to give us the most valuable information?
- How can we record the information we collect?

Outline what we will do to complete the Waste Audit and break students into appropriate groups.

Learning Task (Audit)

(50 minutes)

Note divide students into groups if numbers permit. Otherwise all students work in groups to complete the Waste Audit

All students/Group 1 - Waste Audit

	<ul style="list-style-type: none"> • In groups, students to complete a waste audit of selected indoor and outdoor bins (for example one landfill, co-mingled and organics/compost bin from inside and outside). Each group is given an audit sheet to record their data • Students empty their allocated bin on a labelled tarp (so that it is clear which bin contains what) and sort the contents into the following categories: <ul style="list-style-type: none"> * Co-mingled recycling * Paper and cardboard * Organic waste * Soft plastics * Landfill • Take photos as required. • Students record this on their audit sheet. • At the end of the audit, calculate the total weight (or amount of items if scales not available) for each waste stream, identify contaminants and dispose of appropriately. <p>Group 2 - Bin Audit (optional – this can be completed as a separate task)</p> <ul style="list-style-type: none"> • Selected students complete a bin audit of the school, using a school map and tally chart. • Ensure that students calculate the amount of landfill, recycling and organics indoor and outdoor bins and skips. • Students may also take photographs of bin contents and capacity. <p>Group 3 – Litter Audit (optional – this can be completed as a separate task)</p> <ul style="list-style-type: none"> • Selected students to complete a litter audit of the school, using a school map and tally chart.
<p>Reflection</p> <p><i>(15 minutes)</i></p>	<p>As a group, discuss each group's findings using the following prompts:</p> <ul style="list-style-type: none"> • How much waste does our school produce? • Which type of waste is the most common? • What were the most common items identified? • What were the most common contaminants in each bin? <p>Action planning (in groups, pairs or as a group – depending on the number of students and time)</p>

	<ul style="list-style-type: none"> • Create an action plan to reduce the waste/litter/contamination in the school. • Include the goal, strategies, who will be responsible, timeframe and achievement milestone.
Differentiation	<p>For students that require support:</p> <ul style="list-style-type: none"> • Junior grades tuning in video. • Modify template to include pictures • Count waste items instead of calculating volume • Create mixed ability student groups to enable peer support • Teacher/facilitator to work directly with student groups that require additional support <p>For students that require extension:</p> <ul style="list-style-type: none"> • Calculate the total quantity/weight of waste based on audit findings. • Analyse ResourceSmart waste billing data and compare to findings from today's audits. Are there any discrepancies? Why/why not? • Collate action plans and prepare a presentation for school leadership and/or the school community. • Research resource recovery/community recycling schemes, ways that schools reduce waste, etc.
Assessment Questions	<ul style="list-style-type: none"> • Can you say make three statements that related to the data you collected? • Explain a cause and effect from a particular item of waste.
Teacher/Facilitator Notes	<ul style="list-style-type: none"> • Scan copy of audit to upload to ResourceSmart Waste Module Action A1.1 (and A1.2 if litter audit completed) • Collate students' action plans and use to inform waste/litter reduction plan (Waste A2.1) and waste action plan/SEMP (Waste A2.2)