 Guide to conducting a school waste audit – Stages 2 to 5

Table of contents

Table of contents 1

Why do a waste audit 2

Preparing for a waste audit – procedure A 3

Conducting a waste audit – procedure A 4

Conducting a waste audit – procedure B 6

Waste audit recording 7

School waste audit analysis 8

Survey perceptions and behaviours 10

School waste action plan 14

Resources and waste reducing tips 16

Syllabus links 17

Why do a waste audit

A waste audit tells us the quantity and types of waste generated in a school. This can lead to developing strategies to reduce waste sent to landfill, such as increased recycling.

A hands-on waste audit is a memorable experience that links across KLAs with students developing skills in:

* numeracy – measuring, charting, costing
* literacy – discussing, presenting, reporting
* working scientifically – planning and conducting investigations, processing and analysing data
* design and production – problem solving, planning and implementing
* geographical inquiry – acquiring, processing, communicating geographical information
* personal and social capability – self-management, collaborating.

Benefits of reducing waste

Reducing waste is a simple way of making our resources last longer. New landfill sites are hard to find and transporting waste is costly.

Schools can save money by reducing the number of skip bins of waste that they send to landfill.

Planning to reduce waste

The hands-on waste auditing experience is an effective way of raising awareness of waste issues. In addition to a waste audit, surveys can be used to ascertain people’s attitudes and behaviours to school waste management. Sample interview questions are provided in this guide.

Procedure for reducing waste:

1. Conduct a waste audit to measure how much and what types of waste are generated by your school.
2. Analyse the waste audit results.
3. Survey school staff and students to ascertain attitudes and behaviours to waste.
4. Research and discuss ways of reducing waste.
5. Prepare a brief report on waste at your school and including proposals for improvements and proposed waste reduction targets.
6. Present the report to the school environment committee, student representative council (SRC) or to the school executive.
7. Seek approval from the principal to approve waste reduction strategies and targets.
8. Implement strategies to meet targets.
9. Evaluate the implementation through the conduct of another audit.

Preparing for a waste audit – procedure A

1. Seek parental permission for students to participate in a waste audit.
2. Make prior arrangements with cleaners to collect the day’s rubbish in labelled garbage bags. Don’t choose to do the audit on a Monday because waste would have to be kept over the weekend. Choose a typical day, not one when a year group is away on excursion.
3. Provide marker pens and labels. Make sure waste from different areas such as playground, classrooms, offices and the canteen is kept in separate bags. In a large school consider sampling waste, for instance, only take waste from half the rooms and playground.
4. Store the bags near where you will be sorting and weighing the next day. This location should be comfortable, sheltered and fairly close to the skip bin pick-up site.
5. Arrange for a number of class groups to participate, for example, one class at a time for about 30 to 40 minutes.

Equipment list

* Scales
* Kitchen tongs
* Gloves
* Labelled sorting buckets
* Large tarpaulins or ground sheets
* Data recording sheets
* Clip boards and pencils

Equipment may be able to be borrowed from your local environmental education centre.

Figure 1 – secondary students sorting waste into labelled buckets



Image: Rumbalara Environmental Education Centre

Conducting a waste audit – procedure A

Thorough preparation enables a waste audit to run smoothly. It is recommended that one class undertake the audit at a time, with classes each working for 30 to 40 minutes in tandem.

1. Prepare the sorting area by:
   * laying out one or more tarpaulins, each about 3 metres by 3 metres
   * placing labelled sorting buckets around the tarpaulins.

Figure 2 – tarpaulin and labelled buckets set up for sorting waste



Image: Rumbalara Environmental Education Centre

1. Prepare the weighing and recording area by:
   * setting up a desk for the scales and chairs for the recorders
   * printing the waste recording sheets and attaching to clipboards.

Figure 3 – suggested set up of the weighing and recording area



Image: Rumbalara Environmental Education Centre

1. When the class arrives explain the:
   * purpose of the waste audit
   * procedure of the audit
   * categories of waste.
2. Demonstrate the waste audit process to the students:
   * empty a bag of rubbish onto the ground sheet
   * sort individual items of rubbish into the buckets using gloved hands and tongs
   * ensure students understand each of the categories.
3. Categories of waste for the purpose of the waste audit:
   * office white paper – office paper, photocopies on white paper
   * recyclable paper and cardboard – newspapers, magazines, paper bags, coloured paper
   * compostable organic waste – fruit and vegetable scraps, tea bags, lawn clippings
   * recyclable containers – plastic containers, PET bottles, metal cans such as aluminium or steel cans, glass bottles
   * mixed waste (non-recyclable) – chip packets, plastic lunch wrap, dust, drink poppers, straws, styrofoam cups, takeaway coffee cups.
4. Explain health and safety precautions.
5. Allocate equipment and jobs:
   * two recorders
   * two weighers
   * four carriers
   * sorters – remainder of students.
6. Carriers:
   * bring the bags of waste to be sorted
   * ensure that waste from different collection areas doesn’t get mixed
   * take the sorting buckets to be weighed
   * tell the recorders where the waste came from, for example, the playground
   * take waste to the skip bin after weighing and return promptly to the sorting area.
7. Weighers:
   * weigh each bucket of waste and provide a net weight (contents only) to the recorders
   * provide a volume estimate to the recorders. Note: Waste should be measured by both weight and volume. Volumes relate to the number of skip bins for which the school pays. Volume is recorded in litres and is the capacity of the container.
8. Recorders:
   * sit or stand near the weigher and makes sure all results get recorded
   * record quantities on the waste audit recording tables.

Conducting a waste audit – procedure B

This procedure has students sorting their waste as they dispose of it. It is less messy and best suits students who eat in their classrooms or a designated space. It requires many containers, such as buckets, at least five per class and space.

Day 1 – waste collection day

1. Select one or two classes from each grade to provide a representative sample.
2. Arrange for the sample classes to eat in their classrooms or a separate section of the lunch area, ensuring the class’s waste containers travel with the class for the day for their exclusive use.
3. Explain to the students the:
   * purpose of the waste audit
   * sampling method to be used
   * procedure of the waste audit
   * categories of waste, ensuring students understand the waste categories.
4. Provide each of the sample classrooms, the staffrooms, offices and canteen with labelled waste containers into which students and staff dispose of their waste for the whole day. Lined labelled buckets are suitable containers.
5. As per procedure A the waste categories are:
   * office white paper – office paper, photocopies on white paper
   * recyclable paper and cardboard – newspapers, magazines, paper bags, milk cartons, coloured paper
   * compostable organic waste – fruit and vegetable scraps, tea bags, lawn clippings
   * recyclable containers – plastic containers, PET bottles, metal cans such as aluminium or steel cans, glass bottles
   * mixed waste (non-recyclable) – chip packets, plastic lunch wrap, dust, drink poppers, styrofoam cups, takeaway coffee cups
6. Seal and store collected waste in a safe place, labelled with waste type, class or room.
7. Advise cleaners not to dispose of rubbish for that day.

Day 2 – following day

1. Students work in teams to record the volume and weight of each type of waste per sample room on the waste audit recording tables. Note: Waste should be measured by both weight and volume. Volumes are important because they relate to the number of skip bins for which the school pays. Volume is recorded in litres and is the capacity of the container.
2. Use the sample audits to estimate the quantities of each type of waste for the whole school.

Waste audit recording

Modify tables 1 and 2 according to needs, for instance, deeper cells may be needed for recording multiple weights. Print the recording sheets and attach to clipboards.

The location is the source of the waste collected, for example, class 4F. For ease of calculations, provide containers of equal size within a location, for example seven litre buckets in the library.

Volume of waste

Use tally marks in table 1 to record the number of containers of each type of waste.

Table 1 – tally of number of containers of each type of waste per location

| Location | Volume of each container (litres) | Office white paper | Recyclable paper and cardboard | Organic waste (compostable) | Recyclable containers | Mixed waste (non-recyclable) |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | Tally total | Tally total | Tally total | Tally total | Tally total |

Weight of waste

Use table 2 to record the weight of each type of waste collected. Record in kilograms (kgs).

Table 2 – weights of each type of waste per location

| Location | Office white paper | Recyclable paper and cardboard | Organic waste (compostable) | Recyclable containers | Mixed waste (non-recyclable) |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Total | Total | Total | Total | Total |

School waste audit analysis

1. Multiply the number of containers filled by their volume to calculate the total volume of waste generated for each waste type.
2. Record all the totals of volume and weight onto the waste audit summary table – table 3.
3. Calculate how much waste is generated:
   * per year in weight (kilograms) and volume (litres)
   * per person per year.
4. Record the volume of each category of waste collected from each area of the school in table 4.
5. Record the weight of each category of waste collected from each area of the school in table 5.
6. Find out how much your school spends on waste disposal per year by examining the school’s waste disposal bills. Record the contractors and annual costs in table 6.
7. Chart the results from the summary table, categories by location tables and waste costs into spreadsheets and create charts, for example, a pie graph of volume of waste categories and column graph of waste costs. These charts provide baseline data against which improvements can be measured. As visual representations they can be used to encourage the school community to reduce waste generation.
8. Analyse the results to compare:
   * weight and volume of each waste category
   * weight and volume for each area of the school
   * percentage of waste that can be recycled
   * percentage of waste that can’t be recycled
   * predict the cost benefits of increased recycling.

Table 3 – waste audit summary table

| Volume and weight | Office white paper | Recyclable paper and cardboard | Organic waste (compostable) | Recyclable containers | Mixed waste (non-recyclable) | Totals |
| --- | --- | --- | --- | --- | --- | --- |
| Volume – litres |  |  |  |  |  |  |
| Weight – kilograms |  |  |  |  |  |  |

Table 4 – waste categories by weight (kilograms) for different areas of the school

| Area of the school | Office white paper | Recyclable paper and cardboard | Organic waste (compostable) | Recyclable containers | Mixed waste (non-recyclable) | Totals |
| --- | --- | --- | --- | --- | --- | --- |
| Playground |  |  |  |  |  |  |
| Staff rooms |  |  |  |  |  |  |
| Classrooms |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Table 5 – waste categories by volume (litres) for different areas of the school

| Area of the school | Office white paper | Recyclable paper and cardboard | Organic waste (compostable) | Recyclable containers | Mixed waste (non-recyclable) | Totals |
| --- | --- | --- | --- | --- | --- | --- |
| Playground |  |  |  |  |  |  |
| Staff rooms |  |  |  |  |  |  |
| Classrooms |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Table 6 – waste costs and contractors

| Waste type | Contractor | Annual cost |
| --- | --- | --- |
| Office white paper |  |  |
| Recyclable paper and cardboard |  |  |
| Recyclable containers |  |  |
| Mixed waste (non-recyclable) |  |  |

Survey perceptions and behaviours

Interview the school principal, executive staff, teachers, office staff, general assistant, cleaners and students to ascertain their perceptions of and behaviours to waste management in the school. Interviews could lead to surveying the school community to obtain quantitative data.

Suggested interview questions

Principal or executive staff

* Are you satisfied with the school’s current waste disposal procedures?
* Is the school’s waste management cost-effective?
* Do school waste management decisions consider environmental sustainability?
* Is educating students about waste management important in the school?
* Does the school have any policies or procedures for reducing waste, for example, low waste lunches?
* Can you suggest ways of reducing waste at school?

Administration staff

* Are printers set to print on double-sided mode?
* Does the school purchase recycled copy paper? If so, what percentage recycled content? If not, why not?
* Is there a system to recycle office white paper?
* Is there a system for recycling cardboard and coloured paper?
* Is there a system for recycling used ink cartridges?
* Can you suggest a better method for recycling waste at school?

Teachers

* How do students best learn to reduce waste?
* Is there a system to collect for recycling all office white paper in the classroom?
* Do you re-use one-sided copy paper?
* Is there a problem with litter in the school playground?
* Are there enough bins in the school and are they in appropriate locations?
* Can you suggest better methods for recycling waste at school?
* Are there any good reasons for not recycling waste at school?
* Can you suggest ways of reducing waste at school?

Technology advisor

* Are printers set to print on double-sided mode?
* Do you re-use one-sided copy paper?
* Is there a system to collect for recycling all office white paper?
* Is there a system for recycling used ink cartridges?
* Is there a system for recycling old mobile phones?
* How does the school dispose of old computers?
* When purchasing new computers is preference given to companies that take back old computers?
* Can you suggest a better method for recycling e-waste at school?

Students

* Is there a problem with litter in our school playground?
* Are there enough bins in the playground and are they in the most appropriate locations?
* Do you, or would you, assist with any recycling systems in the school, for example, emptying class recycling bins?
* What is being recycled at school?
* What do you recycle at home?
* Can you suggest a better method for recycling waste at school?

Cleaner

* Where in the school are the areas with the most litter?
* What items present the greatest litter problem?
* Is there a problem with pests, for example, Indian mynah birds, rats or other animals?
* Are there enough bins in the school and are they in the most appropriate locations?
* Is there a system for recycling cardboard boxes?
* Can you suggest a better method for recycling waste at school?

General assistant

* How do you dispose of garden waste?
* Is there a problem with litter thrown on the ground?
* Are there enough bins in the school and are they in the most appropriate locations?
* Are there opportunities for more recycling at school? If so, what and how?
* How do you dispose of toxic waste, for example, old paint tins and chemicals?
* What happens with old school furniture?

Canteen supervisor

* Is there a system for recycling cardboard boxes?
* How do you dispose of fruit and vegetable scraps?
* Is there a system for recycling cans and PET bottles?
* How is food wrapped, in plastic or paper?
* Are there any purchasing policies regarding low waste products?

Analysing the data

Use summary tables, mind maps and other graphic organisers to organise, categorise and represent the data gathered through the interviews. Analyse the data looking for patterns and trends. Compile suggestions for improved waste management and recycling systems. Discuss the viability of suggestions and start to formulate waste reducing strategies guided by the waste hierarchy triangle in figure 4.

Interview summary

* Are there enough garage bins around the school?
* Are the garbage bins in the most appropriate places?
* Are there enough recycling bins and are they in the most appropriate places?
* What did people suggest to improve recycling in the school?
* What did people suggest to improve waste management in the school?
* What did people suggest to reduce waste in the school?

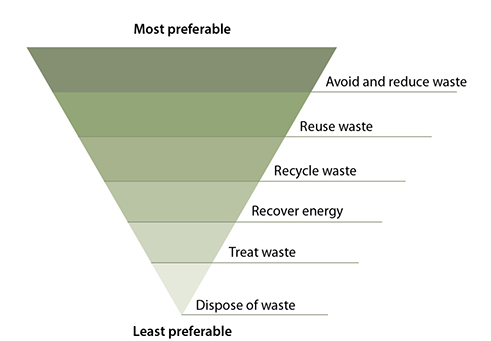
Recycling summary

Use table 7 to compile a summary of the school’s recycling practices. Consult with school administration staff to find organisations that could collect waste for recycling.

Table 7 – school recycling summary

| Waste type | Is it recycled? | What organisation collects it or could collect it? | Annual cost of collection |
| --- | --- | --- | --- |
| Office white paper |  |  |  |
| Recyclable paper and cardboard |  |  |  |
| Organic waste (compostable) |  |  |  |
| Garden waste |  |  |  |
| Recyclable containers |  |  |  |
| E-waste (computers) |  |  |  |
| Ink and toner cartridges |  |  |  |
| Mobile phones |  |  |  |

Figure 4 – the waste hierarchy triangle



[The waste hierarchy](https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/warr-strategy/the-waste-hierarchy). [© State of New South Wales through the Environment Protection Authority](https://www.epa.nsw.gov.au/about-us/contact-us/website-service-standards/copyright)

School waste action plan

Discuss the results of the waste audit and interviews and identify potential challenges. Use brainstorming and research to come up with ways of reducing waste guided by the 5Rs: rethink, refuse, reduce, reuse, recycle. Waste educaton doe

Work collaboratively to agree on solutions and waste reduction targets. Consider other advantages of improved school waste management, for example, fewer pest species, helping the community reduce waste sent to landfill and conserving resources.

Use the following format to develop a school waste action plan. Present the plan to the school using a multimedia format such as Powerpoint or Keynote slides or creatively through the arts. Use persuasive images and infographics to represent key information.

Waste action plan contents

Waste facts

* State the problems with not managing waste sustainably, for example, toxicity and limited availability of landfill sites, the waste of energy and resources when recyclable items are sent to landfill.
* Provide some general facts about waste generation and disposal in NSW.

Recycling facts

* List and illustrate what waste streams or items can be recycled.
* List and illustrate what items can’t be recycled.

Waste audit results

* State the total volume of waste generated by the school over a year.
* State the volume of waste generated per person at school per school year.
* Include a pie graph representing the percentage of total waste of each of the school’s waste streams.
* Include a column graph representing the annual disposal costs of each of the school’s waste streams. Provide an estimate of the savings if waste was diverted from landfill.
* List what waste streams or items are currently being recycled at school.

Interview results

* Provide key comments from people interviewed about waste.
* List suggestions made by interviewees on school waste management.

Our waste reduction ideas and targets

* List the main issues identified through the waste audit and interviews.
* List the proposed solutions, for example:
  + introduction of drink container recycling for fundraising through the [Return and Earn](https://returnandearn.org.au) scheme
  + each year group to have a worm farm for organic waste
  + improve recycling of office white paper
  + introduction of waste mobile phone collection for recycling.
* State the approved annual waste targets, for example:
  + recycle 100% of office white paper
  + 20% reduction in mixed waste sent to landfill.

Resources and waste reducing tips

There are many waste items that can be recycled in schools. Use the suggestions provided in the links when considering ways to reduce waste in the school and in the development of the school waste action plan.

[Schools involvement in the Return and Earn – container deposit scheme](https://education.nsw.gov.au/school-infrastructure-nsw/school-design-and-property-services/environment-sustainability/Container-Deposit-Scheme-Schools-Involvement-Return-And-Earn.pdf) fact sheet, by Schools Infrastructure NSW, outlines key information for schools considering introducing this scheme.

[Your energy savings – reducing and recycling](http://yourenergysavings.gov.au/waste) provides suggestions by the Australian Government on reducing waste.

[Reducing waste](http://www.rumbalara-e.schools.nsw.edu.au/resources/waste/what-can-we-recycle), by Rumbalara Environmental Education Centre, provides practical suggestions for recycling and reducing waste. Note: Providers listed are specific to the Central Coast of NSW.

Teaching and learning resources

Resources, activities and case studies are available on the department’s learning across the curriculum sustainability [waste teaching and learning resources](https://education.nsw.gov.au/teaching-and-learning/curriculum/learning-across-the-curriculum/sustainability/teaching-and-learning-resources/waste) page. The following resources are particularly noteworthy:

* [Waste as art](./?a=231071) by NSW Department of Education provides a valuable and practical toolkit that explores waste reduction and other environmental issues through visual arts
* [Litter free oceans](https://taronga.org.au/litter-free-oceans/), by Taronga Conservation Society, provides an impact calculator and toolkit for schools
* [War on Waste – ABC Education digibook](http://education.abc.net.au/home#!/digibook/2597026/war-on-waste) provides a series of clips from the ABC documentary War on Waste Series 1. [War on Waste](http://www.abc.net.au/ourfocus/waronwaste/), by ABC, provides links to series 2 aired in August 2018.
* [Mobile connections teaching and learning program](https://www.mobilemuster.com.au/education/), by Mobile Muster, provides teaching and learning resources for secondary and primary students.
* [Sustainable Schools NSW](https://www.sustainableschoolsnsw.org.au/about), now managed by the Australian Association for Environmental Education NSW, has a rich resource portal.
* The department’s [sustainability further information](https://education.nsw.gov.au/teaching-and-learning/curriculum/learning-across-the-curriculum/sustainability/further-information) page lists resource portals managed by environmental and sustainability education providers.

Sustainability action process

Use the [sustainability action process](https://education.nsw.gov.au/teaching-and-learning/curriculum/learning-across-the-curriculum/sustainability/sustainability-action-process) as a scaffold for students’ waste investigations and waste action planning.

Syllabus links

Waste audits that lead to the development of school waste action plans provide opportunities for students across several subject areas as listed below.

Mathematics

Waste audits require students to work mathematically in collecting, analysing and representing data. Students measure mass and volume and use multiplication and division to analyse data.

English

Students use literacy skills in interviewing, collaborating and communicating proposed waste reduction strategies.

Geography

Investigations into managing waste sustainably uses geographical inquiry skills in support of the Geography K-10 Syllabus in:

* Early Stage 1 People live in places – important places
* Stage 1 Features of places – how a place can be cared for
* Stage 2 The Earth’s environment – protection of environments
* Stage 3 Factors that shape places – factors that change environments; humans shape places
* Stage 4 Place and liveability – environmental quality
* Stage 4 Interconnections – production and consumption
* Stage 5 Environmental change and management – environmental management.

Science and technology

Investigating sustainable resources in design and production processes supports learning in the Science and Technology K-6 Syllabus and Science 7-10 Syllabus in:

* Stage 1 Earth and space – conservation of Earth’s resources
* Stage 2 Material world – materials are used for a specific purpose
* Stage 3 Material world – properties of materials determine their use
* Stage 4 Earth and space – how scientific understandings influence choices.

PDHPE

Undertaking personal actions that reduce waste such as not littering, recycling, bringing low waste lunches and re-usable containers are actions that contribute to healthy and safe lifestyles and communities.

Syllabus links per activity

Conducting a waste audit as project based learning enables the development knowledge and skills content across several KLAs as shown in table 8. Note: Listed outcomes may apply to more than one set of activities.

Table 8 – suggested syllabus links per activity

| Activities | Knowledge and understandings outcomes | Skills outcomes |
| --- | --- | --- |
| Define ‘waste’, ‘landfill’, ‘recycle’, ‘recyclable’.  Discuss why waste is an issue locally, nationally and globally.  Identify items that fit the five waste categories as per waste audit process.  Investigate the properties of waste materials, origins and life cycles of products.  Investigate recycling strategies used by people to conserve resources.  Sort and categorise one day’s waste from the school. | Science and technology K-6  ST1-10ES-S recognises observable changes occurring in the sky and on the land and identifies Earth’s resources  ST2-7MW-T investigates the suitability of natural and processed materials for a range of purposes  ST3-7MW-T explains how the properties of materials determine their use for a range of purposes  Science 7-10  SC4-13ES explains how advances in scientific understanding of processes that occur within and on the Earth, influence the choices people make about resource use and management | Science and technology K-6  ST2-1WS-S questions, plans and conducts scientific investigations, collects and summarises data and communicates using scientific representations  ST3-1WS-S plans and conducts scientific investigations to answer testable questions, and collects and summarises data to communicate conclusions  Science 7-10  SC4-6WS follows a sequence of instructions to safely undertake a range of investigation types, collaboratively and individually  SC5-6WS undertakes first-hand investigations to collect valid and reliable data and information, individually and collaboratively |
| Measure weights and volumes of waste categories.  Record results on spreadsheets and graphically.  Analyse school waste bills for landfill and recycling costs.  Analyse waste audit results and identify problems. | Mathematics K-10  MA2-11MG measures, records, compares and estimates volumes and capacities using litres, millilitres and cubic centimetres  MA2-12MG measures, records, compares and estimates the masses of objects using kilograms and grams  MA2-18SP selects appropriate methods to collect data, and constructs, compares, interprets and evaluates data displays, including tables, picture graphs and column graphs  MA3-18SP uses appropriate methods to collect data and constructs, interprets and evaluates data displays, including dot plots, line graphs and two-way tables | Mathematics K-10  MA2-1WM uses appropriate terminology to describe, and symbols to represent, mathematical ideas  MA3-1WM uses appropriate methods to collect data and constructs, interprets and evaluates data displays, including dot plots, line graphs and two-way tables  MA4-1WM communicates and connects mathematical ideas using appropriate terminology, diagrams and symbols  MA5.1-1WM uses appropriate terminology, diagrams and symbols in mathematical contexts  Science 7-10  SC4-7WS processes and analyses data from a first-hand investigation and secondary sources to identify trends, patterns and relationships, and draw conclusions  SC5-7WS processes, analyses and evaluates data from first-hand investigations and secondary sources to develop evidence-based arguments and conclusions |
| Conduct a survey of waste attitudes and knowledge.  Undertake problem solving to propose strategies that reduce waste to landfill. | Geography K-10  GE2-3 examines differing perceptions about the management of places and environments  GE3-4 compares and contrasts influences on the management of places and environments  GE4-4 examines perspectives of people and organisations on a range of geographical issues  GE-5-5 assesses management strategies for places and environments for their sustainability | Geography K-10  GE2-4 acquires and communicates geographical information using geographical tools for inquiry  GE3-4 acquires, processes and communicates geographical information using geographical tools for inquiry  GE4-7 acquires and processes geographical information by selecting and using geographical tools for inquiry  GE5-7 acquires and processes geographical information by selecting and using appropriate and relevant geographical tools for inquiry |
| Plan waste reducing strategies and targets.  Report waste audit results, waste reduction suggestions and targets to the school community and decision makers.  Implement school waste action plan.  Take personal actions to reduce waste.  Monitor and review school waste action plan. | Geography K-10  GE1-2 identifies ways in which people interact with and care for places  GE2-2 describes the ways people, places and environments interact  GE2-3 examines differing perceptions about the management of places and environments  GE3-2 explains interactions and connections between people, places and environments  GE4-3 explains how interactions and connections between people, places and environments result in change  GE5-5 discusses management of places and environments for their sustainability  PDHPE K-10  PD1-7 explores actions that help make home and school healthy, safe and physically active spaces  PD2-7 describes strategies to make home and school healthy, safe and physically active spaces  PD3-7 proposes and implements actions and protective strategies that promote health, safety, wellbeing and physically active spaces | English K-10  EN2-1A communicates in a range of informal and formal contexts by adopting a range of roles in group, classroom, school and community contexts  EN3-1A communicates effectively for a variety of audiences and purposes using increasingly challenging topics, ideas, issues and language forms and features  EN4-3B uses and describes language forms, features and structures of texts appropriate to a range of purposes, audiences and contexts  EN5-3B selects and uses language forms, features and structures of texts appropriate to a range of purposes, audiences and contexts, describing and explaining their effects on meaning |

[English K-10 Syllabus](https://syllabus.nesa.nsw.edu.au/english/english-k10/) © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales, 2012

[Geography K-10 Syllabus](https://syllabus.nesa.nsw.edu.au/hsie/geography-k10/) © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales, 2015

[PDHPE K-10 Syllabus](http://educationstandards.nsw.edu.au/wps/wcm/connect/2f657694-dc52-48ba-a440-9256e92c00e3/pdhpe-k-10-syllabus-2018-pdf.pdf?MOD=AJPERES&CVID=) © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales, 2018

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