

# waste audits



## Early Stage One

### SCIENCE

STe 4MW-ST identifies that objects are made of materials that have observable properties

- identify and sort a variety of different waste items based on their material

STe-1WS-S observes, questions and collects data to communicate ideas

- make observations using senses through participation in guided scientific investigations (waste audit)
- record observations using drawings, simple digital recording methods, oral descriptions and/or simple visual representation

### MATHEMATICS

MAe-2WM uses objects, actions, technology and/or trial and error to explore mathematical problems

- Sort and classify familiar objects and explain the basis for these classifications

MAe-11MG describes and compares the capacities of containers and the volumes of objects or substances using everyday language

- Compare the volumes of two piles of material directly by filling two identical containers
- Use comparative language to describe volume and capacity
- Record volume and capacity comparisons informally using drawings, numerals and words

MAe-17SP represents data and interprets data displays made from objects

- group objects according to characteristics to form a simple data display

### HSIE

GEe-1 - identifies places and develops an understanding of the importance of places to people

- matches features in photographs, pictures, and models to those seen in their environment
- names and talks about places and features in their home, school and immediate environment

## Stage One

### SCIENCE

ST1-10ES-S recognises observable changes occurring in the sky and on the land and identifies Earth's resources

- identify and explore the use of a variety of Earth's resources
- plan and implement strategies considering conservation of resources to address sustainability and to meet personal and/or community needs

ST1 6MW-S identifies that materials can be changed or combined

- investigate how materials can be changed by bending, twisting and stretching
- investigate how different materials can be combined

ST1 7MW-S describes how the properties of materials determine their use

- evaluate a product, demonstrating understanding of the suitability of materials
- identify the positive and negative impact of a design solution within an environment



ST1-1WS-S observes, questions and collects data to communicate and compare ideas

- explore and answer questions through participation in guided scientific investigations (waste audit)
- record observations accurately and honestly using observational drawings, labelling, informal measurements and digital technologies

## HSIE

GE1-2 identifies ways in which people interact with and care for places

- consideration of how a place can be cared for e.g. a park, farm, beach, bushland

## MATHEMATICS

MA1-2WM uses objects, diagrams and technology to explore mathematical problems

MA1-3WM supports conclusions by explaining or demonstrating how answers were obtained

- use and explain mental grouping to count and to assist with estimating the number of items in large groups
- estimate, to the nearest hundred, the number of objects in a collection and check by counting

MA1-11MG measures, records, compares and estimates volumes and capacities using uniform informal units

- estimate the volume of a pile of material and check by measuring, e.g. estimate how many buckets would be used to form a pile of sand
- record volumes by referring to the number and type of uniform informal unit used
- Compare and order several objects based on volume and capacity using appropriate uniform informal units
- record volume and capacity comparisons informally using drawings, numerals and words, and by referring to the uniform informal unit used

MA-12MG measures, records, compares and estimates the masses of objects using uniform informal units

- record comparisons of mass informally using drawings, numerals and words, and by referring to the uniform informal units used
- compare two or more objects according to their masses
- find differences in mass by measuring and comparing
- estimate mass by referring to the number and type of uniform informal unit used and check by measuring

MA-17SP gathers and organises data, displays data in lists, tables and picture graphs, and interprets the results

- gather data and track what has been counted by using concrete materials, tally marks, words or symbols
- record a data display created from concrete materials or pictures of objects (Communicating)
- use displays to communicate information gathered in other learning areas
- record observations based on tables and picture graphs developed from collected data

## PDHPE

PD1-7 explores actions that help make home and school healthy, safe and physically active spaces

PD1-9 demonstrates self-management skills in taking responsibility for their own actions

- describe choices and factors that have an impact on their own and others' health and safety, e.g. smoking, fast food, pollution, participating in physical activity



# Stage Two

## SCIENCE

ST2-1WS-S questions, plans and conducts scientific investigations, collects and summarises data and communicates using scientific representations

- conduct scientific investigations to find answers to questions
- collect and record accurate, honest observations using labelled observational drawings, basic formal measurements and digital technologies as appropriate
- represent and communicate observations, ideas and findings, using formal and informal representations

ST2-7MW-T investigates the suitability of natural and processed materials for a range of purposes

- investigate how the properties of natural and processed materials influence their suitability and use in products, services and/or environments

ST2-10ES-S investigates regular changes caused by interactions between the Earth and the Sun, and changes to the Earth's surface

- identify that scientific knowledge helps people understand the effect of their actions

## HSIE

GE2-3 examines differing perceptions about the management of places and environments

GE2-2 describes the ways people, places and environments interact

- investigate sustainable practices that protect environments
- discussion of ways waste can be managed sustainably

## MATHEMATICS

MA2-11MG measures, records, compares and estimates volumes and capacities using litres, millilitres and cubic centimetres

- Measure, order and compare objects using familiar metric units of capacity
- recognise the need for formal units to measure volume and capacity
- Compare objects using familiar metric units of volume
- distinguish between mass and volume

MA2-12MG measures, records, compares and estimates the masses of objects using kilograms and grams

- Measure, order and compare objects using familiar metric units of mass
- recognise that objects with a mass of one kilogram can be a variety of shapes and sizes
- compare two or more objects by mass measured in kilograms and grams
- record masses 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

- Collect data, organise it into categories, and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies
- represent the same data set using more than one type of display and compare the displays

## PDHPE\*

PD1-7 explores actions that help make home and school healthy, safe and physically active spaces

PD1-9 demonstrates self-management skills in taking responsibility for their own actions

- recognise their responsibility to contribute to a healthy, safe and active environment for themselves and others
- identify problem situations in the playground and classroom and suggest ways to improve their environment



## Stage Three

### SCIENCE

ST3-1WS-S plans and conducts scientific investigations to answer testable questions, and collects and summarises data to communicate conclusions

- make and justify predictions about scientific investigations
- plan and apply the elements of scientific investigations to answer problems
- manage investigations effectively, individually and in groups
- construct and use a range of representations, including tables and graphs, to represent and describe observations, patterns or relationships in data

ST3-7MW-T explains how the properties of materials determines their use for a range of purposes

- investigate characteristics and properties of a range of materials and evaluate the impact of their use
- critique needs or opportunities for designing using sustainable materials

### HSIE

GE3-2 explains interactions and connections between people, places and environments

- identification of ways people influence places and contribute to sustainability

### MATHEMATICS

MA3-11MG selects and uses the appropriate unit to estimate, measure and calculate volumes and capacities, and converts between units of capacity

- select the appropriate unit to measure volume and capacity
- explain and use the relationship between the size of a unit and the number of units needed to assist in determining whether multiplication or division is required when converting between units

MA3-12MG selects and uses the appropriate unit and device to measure the masses of objects, and converts between units of mass

- Choose appropriate units of measurement for mass
- select and use the appropriate unit and device to measure mass
- determine the net mass of the contents of a container after measuring the gross mass and the mass of the container (Problem Solving)

MA3-18SP uses appropriate methods to collect data and constructs, interprets and evaluates data displays, including dot plots, line graphs and two-way tables

- recognise which types of data display are most appropriate to represent categorical data (Communicating)
- Describe and interpret different data sets in context
- use information presented in data displays to aid decision making
- interpret and compare different displays of the same data set to determine the most appropriate display for the data set

*\*new PDHPE syllabus (2018) not in wide use. Optional implementation for 2019; implemented from 2020*