Curriculum Links Level F–6

A guide to linking sustainability into the Victorian curriculum

ResourceSmart Schools

Sustainability Victoria

VICTORIA State Government

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ResourceSmart Schools Curriculum Links

ResourceSmart Schools encourages schools to build sustainability into everything they do. *ResourceSmart Schools Curriculum Links* has been developed as a tool that will assist teachers to build sustainability into their teaching.

ResourceSmart Schools Curriculum Links provides suggested learning activities that link sustainability into all areas of the Victorian Curriculum from Foundation through to Year 6.

It is anticipated that through the links made between the Victorian Curriculum and ResourceSmart Schools, schools will be able to deliver a more comprehensive and integrated approach to education for sustainability. This will assist schools to:

- Meet the cross curriculum priority of sustainability in the Victorian Curriculum F-10 and the Australian Curriculum; and
- Meet the requirements of ResourceSmart Schools by including teaching about the resource areas of water, biodiversity, waste and energy.

For each year level, the activities have been developed to address a Big Question / Inquiry that will be explored:

1 **Foundation:** What is a living world and how do we care for ourselves and one another?

2 **Years 1 and 2:** How do we use natural resources in a sustainable manner to help us in our daily lives?

3 **Years 3 and 4:** What can we learn about the use of natural resources from an Aboriginal and Torres Strait Island people's perspective to help us live in a sustainable manner?

4 **Years 5 and 6:** Why is it important that we live on our planet in a way that is environmentally sustainable, and what can we do as young custodians to safeguard our planet?

The Resource section provides a list of resources for use by teachers and students.

How to use this guide

For ResourceSmart Schools, each action includes module icons to show which resource module they fit with best. The icons that are used are:

Biodiversity module

Waste module

Water module

Energy module

If your school is working on one of these resource modules, search through the document for activities that include the relevant icon.

For more information about ResourceSmart Schools and the resource modules, visit the Resources page of www.resourcesmartschools.vic.gov.au

LEVEL:

Foundation

UNIT:

Life — “Our precious living world”

BIG QUESTION/INQUIRY:

What is a living world and how do we care for ourselves and one another?

RATIONALE:

Being part of a community of living things, we must respect ourselves, one another and show concern for all living things by sharing and being fair.

MAJOR ASSESSMENT TASK:

In a class gathering, where parents are invited to attend, students present an assessment task of their choice demonstrating their response to the question,

What is a living world and how do we care for ourselves and one another?

Domain: The Arts

Strands: Dance/Drama/Media Arts/Music/Visual Arts

Explore and Express Ideas

- Use fundamental locomotor and non-locomotor movements, body parts, bases and zones to explore safe movement possibilities and dance ideas
- Explore sound and silence and ways of using their voices, movement and instruments to express ideas (music)

Drama Practices

- Use voice, facial expression, movement and space to imagine and improvise characters and situations (drama)

Visual Arts Practices

- Experiment with different materials and techniques to make artworks

Present and Perform

- Rehears and perform songs and short instrumental pieces that they have learnt and composed (music)

Respond and Interpret

- Respond to media artworks by describing ideas, characters, setting and stories

Learning Experiences may include:

- Create a dance mimicking the movements of their favourite mini beast. Read story of "The Ant and the Grasshopper" (Aesop) to assist. Walk like ants in a line; hop like grasshoppers; fly and buzz like bees; move like a ladybird etc.

OR

- Create a dance using the movements of fruit/vegetable picking:
  i.e. bend to pick strawberries or carrots; stretch to pick apples or oranges; carry laden baskets of fruit; shake soil off potatoes; react to pricking fingers on blackberry bush. Put these movements together in a set sequence (own choice of order) and repeat to chosen music.

- Create a collage using natural, found materials.

- Learn the song 'Alexander Beetle', and create percussive accompaniment to enhance the song.

- Learn a song about the natural world (biodiversity, water, waste, energy).

- Role-play aspects of the natural world (wind, water, litter, plants and animals).

- Perform dances representing aspects of the natural world (wind, water, litter, plants and animals)

- View a video clip about the natural world and needs of a living thing, such as 'A Bugs Life', 'The Lorax', 'Happy Feet' 'Deadly 60' etc. (animated/real world). List the main characters; identify the setting and retell the story. This may be done through drama, visual art, dance, computer graphics etc. NOTE: do not watch the complete film, but sections which apply to chosen topic.

Suggestions for Formative Assessment:

- In this area teacher observations of child's participation in and completion of activities according to set criteria/rubric

Domain: Critical and Creative Thinking

Questions and Possibilities

- Consider personal reactions to situations or problems and how these reactions may influence thinking

Reasoning

- Consider how reasons and examples are used to support a point of view and illustrate meaning

Meta Cognition

- Investigate ways to problem-solve, using egocentric and experiential language

Learning Experiences may include:

Like vs Do not like

- Consider other consumers, such as small animals; for example spiders, ants, snails and slaters. Share our perception of these through class discussion, poster making and labelling, dramatisation etc.

- Students list and graph the class's favourite foods.
- Students explore and discuss the findings of our favourite food survey.
- Students use their findings for growing their favourite seasonal foods.

- Students explore, through their 5 senses, a range of common and uncommon foods, listing reasons why they like/ do not like something they have experienced. Use a graphic organiser to record results.

- Students sort food, such as fruits from vegetables or sometimes foods from often foods. This activity could be completed using graphics/picture cards.

See Learning Experiences in Personal and Social Capability

Suggestions for Formative Assessment:

- Accurate completion and interpretation of graph (M/SP)
- Accurate completion of graphic organiser and participation in discussion
- Teacher observation of students' use of accurate language to give reasons for their choices

Domain: English

Reading and Viewing

Reading and Viewing involves students understanding, interpreting, critically analysing, reflecting upon, and enjoying written and visual, print and non-print texts. It encompasses reading and viewing a wide range of texts and media, including literary texts. Reading involves active engagement with texts and the development of knowledge about the relationship between them and the contexts in which they are created. It also involves the development of knowledge about a range of strategies for reading.

Writing

Writing involves students in the active process of conceiving, planning, composing, editing and publishing a range of texts. Writing involves using appropriate language for particular purposes or occasions, both formal and informal, to express and represent ideas and experiences, and to reflect on these aspects. It involves the development of knowledge about strategies for writing and the conventions of Standard Australian English.

Speaking and Listening

Speaking and Listening refers to the various formal and informal ways oral language is used to convey and receive meaning. It involves the development and demonstration of knowledge about the appropriate oral language for particular audiences and occasions, including body language and voice. It also involves the development of active-listening strategies and an understanding of the conventions of different spoken texts.

Learning Experiences may include:

Reading

- Teachers and students are encouraged to read appropriate texts in the area of sustainability. These can include both fiction and non-fiction texts in a variety of genres. See the Resource List at the end of this document for examples and ideas.
- Students create a library of their favourite texts.

Writing

- Students are encouraged to write appropriate texts in the area of sustainability. These can include both fiction and non-fiction texts in a variety of genres.
- Students use their school grounds as inspiration to create a list of words and images about the natural environment.

Speaking and Listening

- Students are encouraged to present both formal and informal presentations on sustainability.
- Students are encouraged to listen to and respond to a variety of formal and informal presentations on sustainability.

Using the following genres and processes may assist students in this unit:

- Procedural Text
- Narrative Text
- Explanatory Text

Group Reading

- Scientific language

Oral language:

- Debate
- Oral presentation to audience
- Vocabulary
- Questions
- Clarifying
- Open ended
- Wondering
- Giving Reasons...
- Explanations

These Language Modes are immersed throughout all Learning Experiences listed in varying degrees.

Suggestions for Formative Assessment:

Domain: Ethical Capability

Understanding Concepts

- Explore the meaning of right and wrong, good and bad, as concepts concerned with the outcomes of acts.

Decision Making and Actions

- Explore the effects that personal feelings can have on how people behave in situations where ethical issues are involved

Learning Experiences may include:

Like vs Do not like

- Consider other consumers such as small animals and insects, for example mice, spiders, ants, snails and slaters, and share our perception of these through class discussion, poster making and labelling, dramatisation...

- After having viewed a story/video clip about the natural world and needs of a living thing, such as 'The Ant Bully'; identify the characters perceptions of one another and how these altered during the story. This could be completed through a brainstorm, small group discussion, completion of graphic organiser.

- Students will develop a sense of belonging to and engagement with civic life as an active and informed citizen through caring for the classroom, placing litter in appropriate bins, turning off lights when not needed and turning off taps.

- Students develop a sense of belonging to the school community and learn about respect and concern for others and the environment as the students assist with the care of school gardens, grounds (including picking up litter, correct recycling, having wrapper free lunches) and caring for school animals.

Relates to Learning Experiences in Mathematics in regard to litter mapping...

Suggestions for Formative Assessment:

- In this area teacher observations of child's participation in and completion of activities according to set criteria/rubric

Domain: Health and Physical Education

Strands: Personal, Social, Community Health

Contributing to healthy and active communities

- Identify actions that promote health, safety and wellbeing

Learning Experiences may include:

Food and nutrition

- Students investigate the role of food and nutrition in enhancing health and wellbeing. This may involve guest speakers, for example the school canteen person or gardener, a chef, a sports personality, a doctor, a nutritionist, the Life Ed Van.

- Students develop knowledge, understanding and skills to make healthy, informed food choices and to explore the contextual factors that influence eating habits and food choices – this will include the students learning about where food originates through their active involvement in a school/ community garden. Students plan/ create a healthy food menu

See Learning Experiences in Critical and Creative Thinking and Ethical Capability in regard to healthy v's non healthy foods.

Suggestions for Formative Assessment:

- In this area teacher observations of child's participation in and completion of activities according to set criteria/rubric.
- Accurate completion of menu and participation in discussion

Domain: The Humanities

Strands: Geography

GEOGRAPHICAL CONCEPTS AND SKILLS

Place, space and interconnection

- Describe and explain where places and activities are located

Data and information

- Represent data and the location of places and their features by constructing tables, plans and labelled maps

GEOGRAPHICAL KNOWLEDGE

Places and our connection to them

- Definition of places as parts of the Earth's surface that have been given meaning by people and how places can be defined at a variety of scales
- Weather and seasons
- Natural, managed and constructed features of places, their location and how they change

Learning Experiences may include:

- Make a map of the school (birds-eye view) and identify and label the places you know (front gate, classroom, playground, quiet area) and activities which occur in each area (assembly, play, gardening).

- Mark on the school map where litter is most commonly found. Describe how it gets there.

- Make a map of a school garden bed where edible plants are going to be planted (birds-eye view). Use colour and line to represent the plants within this garden bed.

- Describe the hierarchy of places: from the personal size of their garden, the size of the school grounds, the size of a local park/recreation area. Create a class chart showing Small, Medium and Large Spaces.

- Describe the daily and seasonal weather of their place by its rainfall, temperature, sunshine and wind and how this affects their gardens.

- Use observations and or photographs to identify and describe natural features (for example hills, rivers, trees).

- Identify changes in natural, managed and constructed features in their place, such as the change that occurs in deciduous trees throughout the seasons. Students create a scientific poster to record noted changes.

Suggestions for Formative Assessment:

- Completion of map and correct use of labels (M/MG)
- In this area teacher observations of child's participation in and completion of activities and use of informal language describing size
- Recording of daily and seasonal weather
- Completion of scientific poster according to criteria/rubric (S/SIS)

Strands: History

HISTORICAL KNOWLEDGE

Personal histories

- Differences and similarities between students' daily lives perspectives of life during their parents' and grandparents childhoods including family traditions, leisure time and communications

Learning Experiences may include:

Choose one of the ideas below

- Invite in grandparents and parents to share their memories and stories of where food came from when they were young. Did food come from local places or from far away?

Students draw a picture depicting a message they heard about food in the past.

- Invite in grandparents and parents to share their memories and stories of how waste was managed when they were young. Did they recycle through reusing things?

Students draw a labelled picture depicting a message they heard about waste in the past.

- Invite grandparents and parents in to share their memories and stories of how they used energy when they were young.

Students draw a labelled picture depicting a message they heard about the use of energy in the past.

- Students head out on an excursion to an historical park to see first-hand the use of energy, water, biodiversity and waste in early Australia

Students complete worksheets as a result of the excursion.

Suggestions for Formative Assessment:

- Satisfactory completion of food picture
- Satisfactory completion of waste picture and accurate use of labels
- Satisfactory completion of energy picture and accurate use of labels
- Satisfactory completion of post excursion worksheets

Domain: Intercultural Capability

Strands:

Cultural Practices

- Identify what is familiar and what is different in ways culturally diverse individuals and families live

Cultural Diversity

- Identify and discuss cultural diversity in the school and/or community

Learning Experiences may include:

- Explore various edible plants found within the garden or local nursery and identify where they have come from. Link to cultural naming of food of food and globalisation (for example, Lebanese cucumber and locating Lebanon on the globe/large world map or Dutch Carrots and identifying the Netherlands).

This learning experience links to Geographical Knowledge

- Students explore cultural diversity in food experiences. This may include Languages class meal, a simple discussion about students' past experiences or a multicultural day.

This learning experience links to Critical and Creative Thinking & Health and Physical Education

Suggestions for Formative Assessment:

- Teacher observation of students' participation in the discussion and use of map (H/G/GK) (M/MG)

Domain: Mathematics

Strands: Measurement and Geometry

NUMBER AND ALGEBRA

Patterns and algebra

- Sort and classify familiar objects and explain the basis for these classifications, and copy, continue and create patterns with objects and drawings

MEASUREMENT AND GEOMETRY

Using units of measurement

- Use direct and indirect comparison to decide which is longer, heavier or holds more, and explain reasoning in everyday language
- Connect days of the week to familiar events and actions

Location and transformation

- Describe position and movement

STATISTICS AND PROBABILITY

- Data representation
- Interpret simple data displays about yes/no questions

Learning Experiences may include:

- Students observe, discuss and copy the natural patterns in the world around them, particularly those found in the garden and nature, such as looking at the patterns of seeds inside an apple, the rows of trees in a plantation, the circles in a slice of wood, the patterns on the back of a leaf or ladybird, the stripes on a zebra

- Compare the height and width of plants in the garden/school grounds as they grow.

- Count litter in different areas of the school ground. Compare areas to show which has highest litter count

This learning experience links to The Humanities – Geography

- Make paper pots in which to grow seedlings, making the pots according to the size of the plant which they are going to grow. Measure out soil/potting mix as required.

Choose one of the following two learning experiences:

- Compare the size of produce from the garden. Are all capsicums the same size when they grow?

- Compare the size of chickens to the size of the egg they lay

- Students mark on a class timetable the days they are responsible for the garden, or taking their bins to the compost / worm farm and the recycle bins

- Use everyday language of location and direction when planting or harvesting in the garden, for example, between, near, next to, behind...

Data representation – see learning experience in Creative and Critical Thinking

Suggestions for Formative Assessment:

- Satisfactory recording of a chosen pattern found in the natural world (A/VA)
- Satisfactory collection and recording of plant growth/size over time
- Satisfactory collection, recording and interpretation of where litter is found in the school grounds
- Satisfactory knowledge and completion of timetable/days of week
- Teacher observation of students' use of appropriate language of location when working in the garden/school grounds (H/G/GK)

Domain: Personal and Social Capability

SELF-AWARENESS AND MANAGEMENT

Recognition and expression of emotions

- Develop a vocabulary and practise the expression of emotions to describe how they feel in different familiar situations

Development of resilience

- Identify their likes and dislikes, needs and wants, abilities and strengths
- Recognise that problems or challenges are a normal part of life and that there are actions that can be taken to manage problems

SOCIAL AWARENESS AND MANAGEMENT

Relationships and diversity

- Practise the skills required to include others and make friends with peers, teachers and other adults

Collaboration

- Name and practise basic skills required to work collaboratively with peers

Learning Experiences may include:

- Throughout their time working in the garden/farm/school grounds, students identify and express a range of emotions in their interactions with others. They begin to identify and practise basic skills for including and working with others in the group.

Suggestions for Formative Assessment:

- Teacher observation of students' use of appropriate language/skills when working with others in the garden/school grounds

Domain: Science

SCIENCE UNDERSTANDING

Science as human endeavour

- People use science in their daily lives

Biological sciences

- Living things have a variety of external features and live in different places where their basic needs, including food, water and shelter, are met
- Living things grow, change and have offspring similar to themselves

Chemical science

- Objects are made of materials that have observable properties
- Everyday materials can be physically changed or combined with other materials in a variety of ways for particular purposes

Earth and space sciences

- Observable changes occur in the sky and landscape; daily and seasonal changed affect everyday life
- Earth's resources are used in a variety of ways

SCIENCE INQUIRY SKILLS

Questioning and predicting

- Respond to and pose questions, and make predictions about familiar objects and events

Planning and conducting

- Participate in guided investigations, including making observations using the senses, to explore and answer questions

Recording and processing

- Use a range of methods, including drawings and provided tables, to sort information

Analysing and evaluating

- Compare observations and predictions with those of others

Communication

- Represent and communicate observations and ideas about changes in objects and events in a variety of ways

Learning Experiences may include:

- Through a range of resources, such as hands on, observations, texts and multimedia, students explore and identify the basic needs of all living things (air, water, food, sun &/ shelter)
- Students use a Venn diagram to demonstrate their understanding of the links between basic needs. They are to explore three different living things, for example a human, a pumpkin and a frog. This may be a whole class, small group or individual activity.

- Students will observe one area of the school grounds to detect the range of living things that coexist in this space, recording what they see in the form of a diagram.

Some students may further investigate how the basic needs of the living things found in this particular space are met.

- Students will observe over time particular living things and take notes on their growth and development. This may be observing germination of a seed, eggs hatching, seedlings growing, or implemented through the use of multimedia or hardcopy resources if living things are unavailable.

Students will record the life cycle of a chosen living thing. This may be achieved through the use of multimedia or story (for example The Very Hungry Caterpillar Eric Carle).

Why is it so?

Choose one of the following learning experiences:

- Students are given opportunities to look at the garden for evidence of the concepts of force (wind), and suggest ideas as to why some plants grow on an angle.

- Students are given opportunities to look at the garden for evidence of energy (sun), and suggest ideas as to why some flowers follow the sun or open and close at night.

- Students plant and care for seeds in a variety of conditions/places and observe what occurs. As a result of this care, they can list the needs of plants for quality growth.

These learning experience links to Mathematics, The Humanities and Critical and Creative Thinking

Suggestions for Formative Assessment:

- Satisfactory completion of the Venn diagram
- Satisfactory completion of living things chart/diagram
- Satisfactory completion of life cycle chart/diagram
- Teacher observations of students' reasoning of Why is it so?

Domain: Technologies

DESIGN TECHNOLOGIES

Food and fibre production

- Explore how plants and animals are grown for food, clothing and shelter

Food specialisations

- Explore how food is selected and prepared for healthy eating

Materials and technologies specialisation

- Explore the characteristics and properties of materials and components that are used to create designed solutions

DIGITAL TECHNOLOGIES

Data and information

- Collect, explore and sort data and use digital systems to present data creatively
- … share information with known people in safe online environments

Learning Experiences may include:

- As a class and using the Alphabet Key, students list as many farm animals as they can.

- Students choose one animal from the class list to investigate and record their findings using digital technology – this may be as simple as choosing images to create an informative picture of the animal and their needs in their found environment. For example a cow in a fenced paddock, with a barn, hay, a water trough and a farmer…

Students save the above information/ creation and email to a known person or upload to a 1 shared site (google docs…)

- Using a fruit or vegetable, students explore:
  1. Where and how it grows?
  2. When is it ready to harvest?
  3. How is it harvested?
  4. How is it transported to the shop/to your table?
  5. How is it prepared /cooked?
  6. How is it eaten?
  7. Prepare a report on findings

This may be digital, a series of photographs, illustrations, labelled diagrams, graphic organiser, written song lyrics, a poem, written or oral report…).

These learning experience links to multiple Domains

Suggestions for Formative Assessment:

- Satisfactory use of digital technology to create an informative picture
- Satisfactory emailing/uploading of document informative picture
- Satisfactory completion of prepared report on findings of fruit/vegetable investigation

Biodiversity

Energy

Waste & Recycling

Water

	Domains:		Strands/Sub Strands:
A	The Arts	D	Dance
		Dr	Drama
		MA	Media Arts
		M	Music
		VA	Visual Arts
CCT	Critical and Creative Thinking	QP	Questions and Possibilities
		R	Reasoning
		M	Metacognition
E	English		Reading and Viewing
EC	Ethical Capability	UC	Understanding Concepts
		DMA	Decision Making and Actions
HPE	Health and Physical Education		
H	The Humanities	CC	Civics and Citizenship
		EBL	Economics and Business Levels
		G	Geography
		GCS	Geographical Concepts and Skills
		GK	Geographical Knowledge
		H	History
		HCS	Historical Concepts and Skills
		HK	Historical Knowledge
IC	Intercultural Capability	CP	Cultural Practices
		CD	Cultural Diversity
M	Mathematics	NA	Number and Algebra
		MG	Measurement and Geometry
		SP	Statistics and Probability
PSC	Personal and Social Capability	SAM	Self-Awareness and Management
		SoAM	Social Awareness and Management
S	Science	SU	Science Understanding
		Bs	Biological sciences
		Cs	Chemical sciences
		ESs	Earth and Space sciences
		Ps	Physical sciences
		SIS	Science Inquiry Skills
T	Technologies	DT	Design Technologies
		Ts	Technologies and society
		Tc	Technologies context
		Cds	Creating designed solutions
		DiT	Digital Technologies
		Ds	Digital systems
		Di	Data and information
		Cds	Creating digital solutions

LEVEL:

One and Two

UNIT:

Life — “Our irreplaceable common home”

BIG QUESTION/INQUIRY:

How do we use natural resources in a sustainable manner to help us in our daily lives?

RATIONALE:

As we interact in a community of living things, we are challenged to contribute with awareness, care, persistence and respect for ourselves and one another so that we achieve a sustainable lifestyle.

MAJOR ASSESSMENT TASK:

At a ‘Going Green Science Fair’, students demonstrate...

How do we use natural resources in a sustainable manner to help us in our daily lives?

... through presentations for improving an everyday item/action using natural resources in a more sustainable manner.

Domain: The Arts

Strands: Dance/Drama/Media Arts/Music/Visual Arts

Present and Perform:

- Use simple technical and expressive skills when presenting dance that communicates ideas about themselves and their world to an audience

Drama Practices:

- Use voice, facial expression, movement and space to imagine and establish role and situation.

Present and Perform:

- Create and present media artworks that communicate ideas and stories to an audience.

Explore and Express ideas:

- Use imagination and experimentation to explore musical ideas using voice, movement, instruments and body percussion.

Visual Arts Practices:

- Experiment different materials, techniques and processes to make artworks in a range of art forms.

Learning Experiences may include:

Common Products Tasks

- In a group – Create and then present a dance demonstrating the natural resources and energy used to make a chair (or piece of paper). Begin at the tree growing with energy from the sun, nutrients from the soil, and the goodness of water. The tree is chopped down, transported to a factory and shaped with tools and our hands to make a chair (or paper). The chair or paper can then be recycled after use.
- Many forms of energy have gone into making this chair or piece of paper.

Daily Practices Tasks

- In pairs – Create a story about someone dropping some rubbish and then being 'encouraged' to pick it up by a litter monitor and place it in a bin. Students to use voice, face, and body posture to show the role they may be playing.

- On an iPad/tablet – film another group's dance or drama presentation so that it can be shown to another class/ parent group.
- Explore using musical instruments, including the voice and body percussion, to create a soundscape for the drama piece.

Common Products Tasks

- Use articles from the natural world to create a sculpture.

Suggestions for Formative Assessment:

- In this area teacher observations of child's participation in and completion of activities according to set criteria/rubric

Domain: Critical and Creative Thinking

Questions and Possibilities

- Consider personal reactions to situations or problems and how these reaction may influence thinking
- Make simple modifications to known ideas and routine solutions to generate some different ideas and possibilities

Reasoning

- Consider how reasons and examples are used to support a point of view and illustrate meaning

Meta Cognition

- Investigate ways to problem-solve, using egocentric and experiential language

Learning Experiences may include:

Daily Practices Tasks

- Thinking Keys – The Ridiculous Key – Try to justify this statement: By law, every household must recycle every possible part of rubbish.
- Discuss the 5R's (Refuse, Reduce, Reuse, Recycle, Recover)
- Hold a class discussion or debate
- Discuss or debate class/school commitment to one of these issues
  - Efficient use of Water
  - Efficient use of Energy
  - Management of Waste
  - Management of Biodiversity

- Question a current class/school/home practice, collect data to support thinking and create an action plan for a more sustainable response. For example: Recycling – investigate school recycling bins and discuss ways to Refuse and Reduce packaging through Nude Food lunches, Reuse materials and packaging in school projects, and then discuss what's left to Recycle. How is it recycled and can some of it be Recovered instead of going to landfill?
- Students create a poster depicting an action plan to help improve a class sustainable practice.

See Learning Experiences in Mathematics

Common Products Tasks

- Thinking Key – The Commonality – Find common points between: A flyswatter and a car tyre. In small groups, students use a range of experiential language to problem solve the commonality of everyday common products.

Suggestions for Formative Assessment:

- Teacher observes students ability to make possible suggestions during discussion or debate on the Thinking Key
- Teacher observes students participation and suggestions during discussion or debate on the class/school's commitment to the use of resources
- Satisfactory completion of a poster depicting an action plan to help improve a class sustainable practice
- Teacher observes students' satisfactory use of experiential language to problem solve the commonality of everyday common products

Domain: English

Reading and Viewing

Reading and Viewing involves students understanding, interpreting, critically analysing, reflecting upon, and enjoying written and visual, print and non-print texts. It encompasses reading and viewing a wide range of texts and media, including literary texts. Reading involves active engagement with texts and the development of knowledge about the relationship between them and the contexts in which they are created. It also involves the development of knowledge about a range of strategies for reading.

Writing

Writing involves students in the active process of conceiving, planning, composing, editing and publishing a range of texts. Writing involves using appropriate language for particular purposes or occasions, both formal and informal, to express and present ideas and experiences, and to reflect on these aspects. It involves the development of knowledge about strategies for writing and the conventions of Standard Australian English.

Speaking and Listening

Speaking and Listening refers to the various formal and informal ways oral language is used to convey and receive meaning. It involves the development and demonstration of knowledge about the appropriate oral language for particular audiences and occasions, including body language and voice. It also involves the development of active-listening strategies and an understanding of the conventions of different spoken texts.

Learning Experiences may include:

Reading

- Teachers and students are encouraged to read appropriate texts in the area of sustainability. These can include both fiction and non-fiction texts in a variety of genres. See the Resources section of this document for examples.
- Students create a class library list of favourite texts about the natural environment.

Writing

- Students are encouraged to write appropriate texts in the area of sustainability. These can include both fiction and non-fiction texts in a variety of genres.
- Students use their school grounds as inspiration to create illustrated storybooks about the natural environment.

Speaking and Listening

- Students are encouraged to make both formal and informal presentations on sustainability.
- Students are encouraged to listen to and respond to a variety of formal and informal presentations on sustainability.
- Students participate in regular readings and discussion of favourite texts on sustainability.

Using the following genres and processes may assist students in this unit:

- Procedural Text
- Narrative Text
- Explanatory Text

Group Reading

- Scientific language

Oral language:

- Debate
- Oral presentation to audience
- Vocabulary
- Questions
  - Clarifying
  - Open Ended
  - Wondering
- Giving Reasons...
- Explanations

These Language Modes are immersed throughout all Learning Experiences listed in varying degrees. .

Suggestions for Formative Assessment:

- Satisfactory completion of a poster depicting an action plan to help improve a class sustainable practice
- Teacher observes students' satisfactory use of experiential language to problem solve the commonality of everyday common products

Domain: Ethical Capability

Understanding Concepts

- Explore the meaning of right and wrong, good and bad, as concepts concerned with the outcomes of acts.

Decision Making and Actions

- Explore the type of acts often considered right and those often considered wrong, and the reasons why they are considered so

Learning Experiences may include:

Daily Practices Tasks

- Students explore the question "What happens when I throw litter on the ground?" – list students' responses and discuss further.

See Learning Experiences in Critical and Creative Thinking.

Suggestions for Formative Assessment:

Domain: Health and Physical Education

Strands: Personal, Social, Community Health

Communicating and interacting for health and wellbeing

- Examine health messages and how they relate to health decisions and behaviours

Contributing to healthy and active communities

- Explore actions that help make the classroom a healthy, safe and active place
- Identify and explore natural and built environments in the community where physical activity can take place

Learning Experiences may include:

Daily Practices Tasks

- Students answer the question, "What messages have you heard about healthy food?" – list students' responses and discuss further.

Common Products Tasks

- Students investigate a space for a kitchen garden to show healthy food growing at school. Explore how a garden requires people to help and work together. For example – "What are all of the jobs it takes to create and look after a kitchen garden?"
- Students explain the need for clean, tidy and safe common areas where physical activity takes place.
- Students create a poster about safe use of Garden Tools for their kitchen garden (create a class rubric of what the poster should include).
- For example, the kitchen garden area is free of sharp garden stakes, the running track is kept clear of litter, the swimming pool is kept clear of leaves, classroom kept clear of food scraps etc.

Suggestions for Formative Assessment:

- Teacher observes students' responses to the key question about healthy food
- Satisfactory completion of Safe Use of Garden Tools poster – according to class rubric

Domain: The Humanities

Strands: Geography

GEOGRAPHICAL CONCEPTS AND SKILLS

Place, space and interconnection

- Identify how people are connected to different places

Data and information

- Represent data and the location of places and their features by constructing tables, plans and labelled maps

GEOGRAPHICAL KNOWLEDGE

Places and our connection to them

- Reasons why some places are special and some places are important to people and how they can be looked after.

Learning Experiences may include:

Daily Practices Tasks

- Locate, count/measure and map where the following resources may be/are found within the school:
  - Use of Water
  - Use of Energy
  - Management of Waste/Litter
  - Management of Biodiversity

For example - make a map of the school (birds-eye view) and identify and label the places you know where these resources are found (drinking taps, classroom lights, recycling bins, butterfly garden).

- Students present the information gained in the form of a graph/chart/table.

See Learning Experiences in Design Technology & Mathematics

Suggestions for Formative Assessment:

- Satisfactory completion of a map and placement of labels including a title (M/MG)
- Satisfactory completion of graph/chart/table identifying location of water/waste/litter/
- energy/biodiversity found within the school (M/MG)

Strands: History

HISTORICAL CONCEPTS AND SKILLS KNOWLEDGE

Historical significance

- Identify the significance of a person and/or place in the local community.

Learning Experiences may include:

Daily Practices Tasks

- Research the significant contributions made to our local community by one of the following people: Gardeners, Parks Officers and Rangers, Waste Management Services, Energy Management Services, Water Management Services.

- Students present their findings as a poster.

Suggestions for Formative Assessment:

- Satisfactory completion of poster demonstrating significant contributions made by a specific person within our local community

Domain: Intercultural Capability

Cultural Practices

- Identify what is familiar and what is different in ways culturally diverse individuals and families live.

Cultural Diversity

- Imagine and explain what their response might be if they were placed in a different cultural situation or setting

Learning Experiences may include:

Daily Practices Tasks

- Discuss daily practises within our own families regarding our use of natural resources, Water, Energy, Waste and Biodiversity and how can we help our families to make simple modifications to change their routines?
- For example – having shorter showers, turning off lights, switching TV off when not in the room, correct use of Recycle Bin, caring for living things...

- Compare and contrast daily practices regarding our use of natural resources.
- Students create graphs/tables showing comparisons of resource use across the school (i.e. length of showers, recycling etc.) and explain plausible reasons why the results may be different amongst different groups of people.

May connect to Learning Experiences in Critical and Creative Thinking

Suggestions for Formative Assessment:

- Teacher observes students' responses to the discussion and suggestions for making healthier changes to our daily practises (EC/UC)
- Satisfactory completion of graph/table to demonstrate the contrast between our use of natural resources and observe students' plausible reasons why the results may be different amongst different groups of people (CCT/QP & R)

Domain: Mathematics

MEASUREMENT AND GEOMETRY

Using units of measurement

- Measure and compare the lengths, masses and capacities of pairs of objects using uninform informal units L1
- Describe duration using months, weeks, days and hours L1
- Compare masses of objects using balance scales L2
- Name and order months and seasons L2
- Use a calendar to identify the date and determine the number of days in each month L2

Location and transformation

- Give and follow directions to familiar locations L1
- Interpret simple maps of familiar locations and identify the relative of positions of key features L2

STATISTICS AND PROBABILITY

Chance

- Identify outcomes of familiar events involving chance and describe them using everyday language such as "will happen", "won't happen", or "might happen" L1
- Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible' L2

Data representation and interpretation

- Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays L1
- Collect, check and classify data L2
- Create displays of data using lists, table and picture graphs and interpret them L2

Learning Experiences may include:

Daily Practices Tasks

- Locate, count/measure and map where the following resources may be/are found within the school:
  - Use of Water
  - Use of Energy
  - Management of Waste/Litter
  - Management of Biodiversity

- Students present the information gained in the form of a graph/chart/table. The information can be used to identify changes that may be needed to improve resource use within the school. For example – "How many recycling bins are needed to supply each classroom and staffroom?" "How many "switch off" energy signs do we need to make for around our school?"

See Learning Experiences in Design Technology & The Humanities - Geography

Suggestions for Formative Assessment:

Domain: Personal and Social Capability

SELF-AWARENESS AND MANAGEMENT

Recognition and expression of emotions

- Extend their vocabulary through which to recognise and describe emotions and when, how and with whom it is appropriate to share emotions

Development of resilience

- Explain how being prepared to try new things can help identify strategies when faced with unfamiliar or challenging situations

SOCIAL AWARENESS AND MANAGEMENT

Relationships and diversity

- Listen to other's ideas, and recognise that others may see things differently

Collaboration

- Recognise that conflict occurs and distinguish between appropriate and inappropriate ways to deal with conflict

Learning Experiences may include:

Daily Practices Tasks

See Learning Experiences in Design Technology & The Humanities - Geography

Suggestions for Formative Assessment:

Domain: Science

SCIENCE UNDERSTANDING

Science as human endeavour

- People use science in their daily lives

Biological sciences

- Living things have a variety of external features and live in different places where their basic needs, including food, water and shelter, are met
- Living things grow, change and have offspring similar to themselves

Chemical science

- Objects are made of materials that have observable properties
- Everyday materials can be physically changed or combined with other materials in a variety of ways for particular purposes

Earth and space sciences

- Observable changes occur in the sky and landscape; daily and seasonal changes affect everyday life
- Earth's resources are used in a variety of ways

SCIENCE INQUIRY SKILLS –

Questioning and predicting

- Respond to and pose questions, and make predictions about familiar object and events

Planning and conducting

- Participate in guided investigations, including making observations, using the senses, to explore and answer questions

Recording and processing

- Use informal measurements in the collection and recording of observations
- Use a range of methods, including drawings and provided tables, to sort information

Analysing and evaluating

- Compare observations and predictions with those of others

Communication

- Represent and communicate observations and ideas about changes in objects and events in a variety of ways

Learning Experiences may include:

Understanding Living Things

- Management of Biodiversity – caring for our school chickens/livestock and tending to their basic needs.

Students demonstrate ability to correctly care for plants and animals found within our classroom/school grounds by tending to their daily needs through individual and group projects/rosters.

Understanding Living Things

- Explore the needs of living things, and list what it is that they need to survive.
- Explore the diet of a variety of living things, classifying them as consumers, producers and decomposers. (See the following website for information on Consumers, Producers and Decomposers, as well as food chains www.sheppardsoftware.com).
- Explore food chains with students, using the food chain games on the website above.
- Students design a scientific poster that presents a known food chain that includes producers, consumers and decomposers.

Common Products Tasks

See Learning Experiences in Design Technologies and Health and Physical Education where students explored trees as useful resources for the community

Understanding Living Things

- Students investigate, design and create a Butterfly Garden/Mini-Beast Mansion within the school grounds using a variety of native species to encourage biodiversity.
- Students explore the question, 'Why do we need a butterfly garden in our school?'

Understanding Living Things

- Students collect and analyse data regarding rainfall and weather patterns to understand how they affect plant growth and animal behaviour. This understanding can then be communicated to the class through posters, tables and graphs, role play, song...

Daily Practices Tasks

As per first Learning Experiences in Critical and Creative Thinking

The Science Inquiry Skills are applicable and practised across all Learning Experiences

Suggestions for Formative Assessment:

- Teacher observes students' ability to follow the class roster and demonstrate correct care for plants and animals found within our classroom/school grounds
- Satisfactory completion of scientific food chain poster
- Satisfactory communication of the link between weather patterns and plant growth or animal behaviour through a poster, table and graph, role play or song.
- Satisfactory completion of the garden using appropriate native species to encourage biodiversity
- Satisfactory and safe use of gardening tools (HPE) and planting procedures

Domain: Technologies

Strands: Design Technologies

TECHNOLOGIES CONTEXTS

Food and fibre production

- Explore how plants and animals are grown for food, clothing and shelter

Food specialisations

- Explore how food is selected and prepared for healthy eating

Materials and technologies specialisation

- Explore the characteristics and properties of materials and components that are used to create designed solutions

DIGITAL TECHNOLOGIES

Data and information

- Collect, explore and sort data, and use digital systems to present the data creatively
- Share information with known people in safe online environments

Strands: Digital Technologies

Data and information

- Collect, explore and sort data, and use digital systems to present the data creatively
- Share information with known people in safe online environments

Learning Experiences may include:

Common Products Tasks –

- Read the picture story book by Shel Silverstein (1964) The Giving Tree Harper & Row, to engage the children in thinking about our interaction with trees/living things.
  As a class, discuss the students' thoughts on our interactions with living things.

- Students will explore and explain how plants are grown for a variety of purposes, including food, clothing, household items, warmth, shelter etc.
  Through the use of a graphics organiser, students will explain the purpose of growing particular plants. For example cotton for clothing and trees for house building.

- Students focus on the value of a tree in relation to the way a tree provides for our needs and brainstorm the uses of a tree. Students then sort and classify these uses.
  Students create a scientific poster to demonstrate their understanding of the many uses of trees in our society.

- Students will investigate a household object, for example a wooden chair, and decide why this particular material was used to create this product and where this material originates
  In small groups, students create a short iMovie/digital presentation explaining their understanding of the origin of the material and thoughts and reasoning for how this material can be looked after and sustained for years to come.

Daily Practices Tasks

- Students create a digital presentation demonstrating simple ways to be environmentally sustainable in their daily lives (Nude Food to school, reusable drink bottle, composting food scraps, switching off lights etc.).
- Students share digital presentation with class/family/school etc.

See Learning Experiences in Critical and Creative Thinking

Suggestions for Formative Assessment:

- Teacher observes students' participation in class discussion about our interactions with living things
- Satisfactory completion of graphic organiser depicting the purpose of growing particular plants
- Satisfactory completion of scientific poster depicting the many uses of trees in our society
- atisfactory completion of small group iMovie/digital presentation, identifying a common products, why it works and its origins (T/DT Di)
- Satisfactory completion of small group iMovie/digital presentation, identifying a common products, why it works and its origins (CCT/QP & MC)
- Satisfactory emailing/uploading of document informative picture

Biodiversity

Energy

Waste & Recycling

Water

	Domains:		Strands/Sub Strands:
A	The Arts	D	Dance
		Dr	Drama
		MA	Media Arts
		M	Music
		VA	Visual Arts
CCT	Critical and Creative Thinking	QP	Questions and Possibilities
		R	Reasoning
		M	Metacognition
E	English		Reading and Viewing
EC	Ethical Capability	UC	Understanding Concepts
		DMA	Decision Making and Actions
HPE	Health and Physical Education		
H	The Humanities	CC	Civics and Citizenship
		EBL	Economics and Business Levels
		G	Geography
		GCS	Geographical Concepts and Skills
		DI	Data and Information
		GK	Geographical Knowledge
		H	History
		HCS	Historical Concepts and Skills
		HK	Historical Knowledge
IC	Intercultural Capability	CP	Cultural Practices
		CD	Cultural Diversity
M	Mathematics	NA	Number and Algebra
		MG	Measurement and Geometry
		SP	Statistics and Probability
PSC	Personal and Social Capability	SAM	Self-Awareness and Management
		SoAM	Social Awareness and Management
S	Science	SU	Science Understanding
		Bs	Biological sciences
		Cs	Chemical sciences
		ESs	Earth and Space sciences
		Ps	Physical sciences
		SIS	Science Inquiry Skills
T	Technologies	DT	Design Technologies
		Ts	Technologies and society
		Tc	Technologies context
		Cds	Creating designed solutions
		DiT	Digital Technologies
		Ds	Digital systems
		Di	Data and information
		Cds	Creating digital solutions

LEVEL:

Three and Four

UNIT:

The Natural World

BIG QUESTION/INQUIRY:

Aboriginal and Torres Strait Island people have a wonderful understanding of the environment and interacted with it accordingly.

What can we learn about the use of natural resources from an Aboriginal and Torres Strait Island people's perspective to help us live in a sustainable manner?

RATIONALE:

As we interact in a community of living things, with a rich diversity of perspectives, we are challenged to learn from Aboriginal and Torres Strait Islander people and recognise and identify skills which demonstrate a positive relationship with the earth.

MAJOR ASSESSMENT TASK:

Utilising the four key resources, Biodiversity, Energy, Waste and Water, from the ResourceSmart Schools program, students give an example of the belief of Aboriginal and Torres Strait Islander people that the landscape provides nourishment for survival, to enable all life to share and celebrate the gifts that are provided by nature for each resource.

Domain: The Arts

Strands: Dance/Drama/Media Arts/Music/Visual Arts

Explore and Express ideas:

- Improvise and structure movement ideas for dance sequences using safe dance practice, the elements of dance and choreographic devices

Explore and Express ideas:

- Explore ideas and narrative structures through roles and situations and use empathy in their own improvisations and devised drama.

Present and Perform:

- Plan, create and present media artworks for specific purposes with awareness of responsible media practice

Explore and Express ideas (Music):

- Use imagination and creativity to explore pitch, rhythm/time and form, dynamics and tempo using voice, movement and instruments

Present and Perform (Visual Art):

- Explore different ways of displaying artworks to enhance their meaning for an audience.

Learning Experiences may include:

- Explore the idea that The Arts are forms of communication and spiritual expression about connection to the environment in Aboriginal and Torres Strait Islander people's cultures.

- Students explore Aboriginal and Torres Strait Islanders' representation of the environment (animal movement, water in billabongs, rivers and sea) in their dance through the use of media.

- Students explore a Dreamtime story and retell the story to the class through role play. (Explore more than The Rainbow Serpent, being aware that each language area has its own Dreaming stories).

- Students will make a photographic/video journal of the production of an artefact as part of their Adaptation – tools and technology learning experience. Consider the types of natural resource materials used in making artefacts and whether these materials would have been sourced locally.

See Learning Experience in The Technologies: Digital Technologies

- Students explore traditional musical instruments of the Aboriginal people. Use these instruments to explore the sounds in the Australian landscape. Can you create the sound of a kangaroo hopping, snake slithering, wind and water whooshing?

- Students explore local Aboriginal and Torres Strait Islander art techniques and symbols used in representing totems. In Aboriginal spirituality a totem is a natural object, plant or animal that is the spiritual emblem for a person, family or group.
- Students choose a totem that represents the natural world and use art techniques in their production of The Totem Poster.

See Learning Experience in The Humanities: Civics and Citizenship

Suggestions for Formative Assessment:

- Engagement in all of The Arts learning experiences utilising the specific skills learnt for each strand (T-DT) (H-CC)

Domain: Critical and Creative Thinking

Questions and Possibilities

- Explore reactions to a given situation or problem and consider the effect of pre-established preferences

Reasoning

- Investigate why and when the consequences of a point of view should be considered
- Identify and use 'if then...' and 'what if..." reasoning

Meta Cognition

- Consider concrete and pictorial models to facilitate thinking, including a range of visualisation strategies

Learning Experiences may include:

- Teacher reads the picture story book of The Story of Rosy Dock (Jeannie Baker) to the class, followed by the discussion on:
- If early settlers had not introduced rosy dock, then...

- In small groups, students discuss the following statements:
- If early settlers had not introduced rabbits, then...
- If early settlers had not introduced camels, then...
- If early settlers had not introduced foxes, then...
- If early settlers had enjoyed eating kangaroo meat, then...
- If early settlers had followed Aboriginal practises, then...
- If early settlers had not dammed rivers, then...

- As a class, combine the responses to the above statements in the form of a class T Chart.

Suggestions for Formative Assessment:

- Satisfactory participation in small group and whole class discussions

Domain: English

Reading and Viewing

Reading and Viewing involves students understanding, interpreting, critically analysing, reflecting upon, and enjoying written and visual, print and non-print texts. It encompasses reading and viewing a wide range of texts and media, including literary texts. Reading involves active engagement with texts and the development of knowledge about the relationship between them and the contexts in which they are created. It also involves the development of knowledge about a range of strategies for reading.

Writing

Writing involves students in the active process of conceiving, planning, composing, editing and publishing a range of texts. Writing involves using appropriate language for particular purposes or occasions, both formal and informal, to express and represent ideas and experiences, and to reflect on these aspects. It involves the development of knowledge about strategies for writing and the conventions of Standard Australian English.

Speaking and Listening

Speaking and Listening refers to the various formal and informal ways oral language is used to convey and receive meaning. It involves the development and demonstration of knowledge about the appropriate oral language for particular audiences and occasions, including body language and voice. It also involves the development of active-listening strategies and an understanding of the conventions of different spoken texts.

Learning Experiences may include:

Reading

- Teachers and students are encouraged to read appropriate texts in the area of sustainability. These can include both fiction and non-fiction texts in a variety of genres.
- Explore a range of Indigenous Australian children's books (e.g Dingo's Tree by Gladys & Jill Milroy, Why I Love Australia by Bronwyn Bancroft, Splosh for the Billabong by Ros Moriarty).

For more suggestions of books, see the Resource section at the end of this document.

Writing

- Students are encouraged to write appropriate texts in the area of sustainability. These can include both fiction and non-fiction texts in a variety of genres.
- Students explore ways to write about the Australian landscape incorporating the art elements (pattern, colour, shape, texture, contrast) or create a text that describes how students imagine the Australian landscape looked before early settlers.

Speaking and Listening

- Students are encouraged to present both formal and informal presentations on sustainability.
- Students are encouraged to listen to and respond to a variety of formal and informal presentations on sustainability.
- Students explore the oral tradition in Aboriginal and Torres Strait Islander culture and find examples of spoken stories to listen to and, where possible, observe body language. Students can use this tradition to tell a story about their favourite place in nature – it could be their garden or a place in the bush.

Using the following genres and processes may assist students in this unit:

- Procedural Text
- Narrative Text
- Explanatory Text

Group Reading

- Scientific language

Oral language:

- Debate
- Oral presentation to audience
- Vocabulary
- Questions
  - Clarifying
  - Complex
  - Wondering
- Giving Reasons...
- Explanations

These Language Modes are immersed throughout all Learning Experiences listed in varying degrees.

Suggestions for Formative Assessment:

Domain: Ethical Capability

Understanding Concepts

- Discuss the ways to identify ethical considerations in a range of problems

Decision Making and Actions

- Discuss the role of personal values and dispositions in ethical decision-making and actions

Learning Experiences may include:

See Learning Experience in Personal and Social Capability

Suggestions for Formative Assessment:

Domain: Health and Physical Education

Strands: Personal, Social, Community Health

Being healthy, safe and active

- Identify and practise strategies to promote health, safety and wellbeing

Communicating and interacting for health and wellbeing

- Discuss and interpret health information and messages in the media

Contributing to healthy and active communities

- Describe strategies to make the classroom and playground healthy, safe and active places
- Participate in outdoor games and activities to examine how participation promotes a connection between the community, natural and built environments, and health and wellbeing

Learning Experiences may include:

The Growing, Preparation and Cooking of Traditional Food

- Students explore traditional cooking and food preparation methods of Aboriginal and Torres Strait Islander people. Invite a guest speaker, or make use of media resources to obtain appropriate information, such as:

  TV series: Wild Kitchen with Clayton Donovan: ABC TV series,

  TV series: Tasty bush tucker by ABC Gardening Australia http://splash.abc.net.au/home#!/media/30798/understanding-bush-foods

  Article: About Native Australian food SBS http://www.sbs.com.au/food/article/2008/07/01/about-native-australian-food

- As a class, produce a persuasive text to the school community outlining the positive aspects of an Indigenous food garden for wellbeing and food production.

- As a class, devise a plan for an Indigenous food garden within your school. Use your local Indigenous nursery or Council for information to research which plants are suited to growing in your area. The plan will include a pictorial map identifying where particular plants will be planted and a breakdown of resources and costs required to create the garden.

- As a class, create your Indigenous food garden within your school, using your pictorial map to assist with the design and planting.

- Ensuring all safety measures are utilised, students experiment with cooking using the ingredients from the Indigenous food garden and the skills, methods and recipes obtained through their research. (If produce from own Indigenous food garden is not harvestable, seek ingredients from another local source.)

Traditional Remedies

- Many Aboriginal and Torres Strait Islander people knew of the medicinal qualities of plants. Investigate this statement and the current use of natural plants, being used for medical reasons today.
- Explore how often natural medicines are advertised in the media. Make a digital recording/graph of your findings. Using a graphic organiser, students present their findings.

Suggestions for Formative Assessment:

- Satisfactory completion of graphics organiser demonstrating students' knowledge of
  - using natural medicines vs contemporary medicines
  - our societies dependence on these medicines to live a healthy life

Domain: The Humanities

Strands: Civics and Citizenship

Government and Democracy

- Explain the roles of local government and some familiar services provided at the local level

Laws and Citizens

- Distinguish between rules and laws and discuss why rules and laws are important

Learning Experiences may include:

Aboriginal belief systems and culture are informed by the responsibility of caring for the land. An example is the totem system employed by many language groups. Depending on the place and time of birth, a totem of an animal or plant is assigned to a child. It is their responsibility to be a protector or steward for this animal for the rest of their life. *(Thelma Parker, 2015)*

- Using Tony Ryan's THINKERS KEYS The What If... Students respond to the question, What If your totem was the black cockatoo...
- Students research the Aboriginal totems of the local area and create a poster based on one of these totems, or choose their own totem from an indigenous animal or plant local to their area. For this learning experience divide the students into two groups, one to set their timeframe for 400+ years ago, the other in today's time.

What different knowledge and responsibility for the care of the land will each group have? This may lead to some interesting discussions at the end of their poster presentations.

Teacher Note: think about habitat, introduced species, transport, infrastructure...

- Students find 5 or more points of difference between:
  - Aboriginal and Torres Strait Islander peoples use of the land
  - European settlers use of the land.

Suggestions for Formative Assessment:

- Satisfactory completion of their Totem poster, which will include:
  - a title (name of totem)
  - a collage, illustration or painting of a totem inspired by Aboriginal people's connection to their local area
  - a list of their responsibilities
  - examples of how they will care for their totem.

Domain: The Humanities

Strands: Geography

GEOGRAPHICAL CONCEPTS AND SKILLS

Place, space and interconnection

- Identify and explain the interconnections within places and between places

Data and information

- Interpret maps and other geographical data and information to develop identifications, descriptions, explanations and conclusions, using geographical terminology including simple grid references, compass direction and distance

GEOGRAPHICAL KNOWLEDGE

Places and our connection to them

- The many countries/Places of Aboriginal and Torres Strait Islander peoples throughout Australia, and the custodial responsibility they have for Country/Place, and how this influences views about sustainability.
- Types of natural vegetation and the significance of vegetation to the environment, the importance 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

Learning Experiences may include:

A Place To Call Home

- Students receive a copy of two maps of Victoria; one, a map of Victorian Aborigines language territories and a map of Victoria highlighting regions and major towns. In pairs/small groups, the students lay the maps beside each other to attain a perspective of where Victorian Aboriginal language territories are situated. Students share their findings with the class.

- Students will identify the Victorian Aboriginal language territory of their area.

- Using Tony Ryan's THINKERS KEYS The Interpretations Key... Give 3 possible explanations for:

  For thousands of years, the original inhabitants of Australia, Aboriginal and Torres Strait Islander peoples occupied the lands with very different boundaries than today, centred on intimate relationship with land and sea.

  "It's my father's land, my grandfather's land, my grandmother's land. And I'm related to it, which also gives me my identity." – *Father Dave Passi, Plaintiff in Mabo Case.*

  http://aiatsis.gov.au/explore/articles/aboriginal-australia-map

- Students consider how Aboriginal and Torres Strait Islander people disposed of waste, 400 years ago, without harming the environment compared with how we dispose of our waste in today's society. These findings could be added to the Country and Place poster in the History strand.

See Learning Experience in The Humanities: History

Suggestions for Formative Assessment:

See Assessment Task in The Humanities: History

Domain: The Humanities

Strands: History

HISTORICAL CONCEPTS AND SKILLS

Chronology/Cause and Effect

- Identify the significance of a person and/or place in the local community.

HISTORICAL KNOWLEDGE

Community, Remembrance and Celebrations

- The significance of Country and Place to Aboriginal and Torres Strait Islander people who belong to a local area
- The diversity and longevity of Australia's first peoples and the significant ways Aboriginal and Torres Strait Islander peoples are connected to Country and Place (land, sea, waterways and skies) and the effects on their daily lives

Learning Experiences may include:

Country and Place

Land is fundamental to the wellbeing of Aboriginal people. The land is not just soil or rocks or minerals, but a whole environment that sustains and is sustained by people and culture. For Indigenous Australians, the land is the core of all spirituality and this relationship and the spirit of 'country' is central to the issues that are important to Indigenous people today.

All of Australia's Aboriginals were semi-nomadic hunters and gatherers, with each clan having its own territory from which they 'made their living'. These territories or 'traditional lands' were defined by geographic boundaries such as rivers, lakes and mountains. They understood and cared for their different environments, and adapted to them.

"We cultivated our land, but in a way different from the white man. We endeavoured to live with the land; they seemed to live off it. I was taught to preserve, never to destroy."
Aborigine Tom Dystra

http://www.australia.gov.au/about-australia/australian-story/austn-indigenous-cultural-heritage

- Students consider the statement above, discussing their feelings about this statement.

- Students research and identify the geographical boundaries between Victorian Aboriginal language territories and label their findings on a poster titled 'My Country', which will include a detailed map of Victorian Aboriginal language territories.

- Students will research and identify the indigenous plants and animals found in their local Aboriginal language territory. During the exploration the concept of ecosystems could be explored to discuss what plants and animals need in a place to survive: space, light, water, food, shelter and a place to breed.

- Students investigate, record and compare plants and animals found in bordering Aboriginal language territories to identify trade.

Based on their My Country research task, students begin to identify what they can learn about the use of natural resources from an Aboriginal and Torres Strait Islander people's perspective to help us live in a more sustainable manner.

Suggestions for Formative Assessment:

- Satisfactory completion of 'Country and Place' poster, according to class designed rubrics, including:
  - map of Victorian Aboriginal language territories
  - comparison of indigenous vegetation and fauna found in bordering Aboriginal language territories
  - identification of main trade
  - identification of waste disposal 400 years ago
  - comparison of waste disposal from 400+ years ago to today

Domain: Intercultural Capability

Cultural Practices

- Compare their own and others cultural practices, showing how these may influence the ways people relate to each other

Cultural Diversity

- Explain the role of cultural traditions in the development of personal, group and national identities

Learning Experiences may include:

See Learning Experience throughout all areas within The Humanities and Personal and Social Capability

See Learning Experience in Personal and Social Capability

Suggestions for Formative Assessment:

Domain: The Languages

Students acquire communication skills in a second language. They develop understanding about the role of language and culture in communication. Their reflections on language use and language learning are applied in other learning contexts.

Learning languages broadens students' horizons about the personal, social, cultural and employment opportunities that are available in an increasingly interconnected and interdependent world. The interdependence of countries and communities requires people to negotiate experiences and meanings across languages and cultures.

Learning Experiences may include:

- Teachers and students are encouraged to communicate about sustainability in the language they are learning.
- This may include naming of environmental management systems in the language being learned. For example: Waste Bins also labelled in the second language, garden areas/implements named in second language, language teacher using part of sustainability theme in teaching vocabulary, and an indigenous food/ medicinal garden labelled in the local Aboriginal languages.
- It may also include comparison with the country of the language in research activities being implemented throughout the unit. For example: comparing the Extreme Weather and Geographical Changes that occur in the country of second language to Australia.

Suggestions for Formative Assessment:

Domain: Mathematics

MEASUREMENT AND GEOMETRY

Using units of measurement

- Measure, order and compare objects using familiar metric units of length, area, mass and capacity L3
- Use scaled instruments to measure and compare lengths, masses, capacities and temperatures L4

Location and transformation

- Create simple grid maps to show position and pathways L3
- Identify symmetry in the environment L3
- Use simple scales, legends ad directions to interpret information contained in basic maps L4
- Create symmetrical patterns, pictures and shapes with and without digital technology L4

STATISTICS AND PROBABILITY

Chance

- Conduct chance experiments, identify and describe possible outcomes and recognise variation in results L3
- Identify everyday events where one cannot happen if the other happens L4

Data representation and interpretation

- Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies L3
- Interpret and compare data displays L3
- Select and trial methods for data collection including survey questions and recording sheets L4

Learning Experiences may include:

- Mapping

See Learning Experience in The Humanities: Geography and History, Health and Physical Education, The Arts: Visual Art and Critical and Creative Thinking

Seed Propagation Challenge

- In small groups, students collect a range of local indigenous seeds. These could be sourced from a local Indigenous nursery, collecting seeds from existing plants at the school or contributions from members of the school community. Consider food and medicinal plants for use in the school's Indigenous food garden.

Students make a note of the plant name(s), the size of the plant from which the seed came and the conditions in which it was growing.

- Research the seeds collected, discovering more about the plant's size and the needs for growth, including whether drying is required before propagating.
- Students identify and describe possible growth outcomes and recognise variation in results.
- Students plan for propagation of the seeds, planting them and caring for them as required.
- Student groups compare their success in seed propagation.

See Indigenous Food Garden learning experience in Health and Physical Education

Suggestions for Formative Assessment:

- Satisfactory completion of Seed Propagation Challenge including:
  - seed collection
  - data collection
  - identify and describe possible outcomes
  - analysis of results

Domain: Personal and Social Capability

SELF-AWARENESS AND MANAGEMENT

Recognition and expression of emotions

- Identify and explore the expression of emotions in social situations and the impact on self and others

Development of resilience

- Identify how persistence and adaptability can be used when faced with challenging situations and change

SOCIAL AWARENESS AND MANAGEMENT

Relationships and diversity

- Describe the ways in which similarities and differences can effect relationships

Collaboration

- Demonstrate skills for effective participation in group tasks and use criteria provided to reflect on the effectiveness of the teams in which thy participate

Learning Experiences may include:

- Throughout this unit students have been asked to work frequently in pairs and small groups. Their capacity to do so, understanding the needs of others, will assist in their understanding how Aboriginal and Torres Strait Islander communities have traditionally worked in groups to find food and water, and care for the land.
- Students research how Aboriginal and Torres Strait Islander families had different roles in fulfilling everyday needs and caring for the land before the arrival of the early settlers. For example investigate the roles and activities in finding food, water and shelter, burning off the vegetation, or making tools and implements.
- Consider how Aboriginal and Torres Strait Islander peoples managed and shared the use of natural resources.

Suggestions for Formative Assessment:

- Satisfactory participation in class discussions

Domain: Science

SCIENCE UNDERSTANDING

Science as human endeavour

- Science knowledge helps people to understand the effects of their actions

Biological sciences

- Different living things have different life cycles and depend on each other and the environment to survive.

Chemical sciences

- Natural and processed materials have a range of physical properties; these properties can influence their use

Earth and space sciences

- Earth's surface changes over time as a result of natural processes and human activity

SCIENCE INQUIRY SKILLS

Questioning and predicting

- With guidance, identify questions in familiar contexts that can be investigated scientifically and predict what might happen based on prior knowledge

Planning and conducting

- Safely use appropriate materials, tools, equipment and technologies

Recording and processing

- Use a range of methods including tables and column graphs to represent data and to identify patterns and trends

Analysing and evaluating

- Compare results with predictions, suggesting possible reasons for findings

Communication

- Represent and communicate ideas and findings to show patterns and relationships using formal and informal scientific language.

Learning Experiences may include:

- Students discuss examples of how Aboriginal and Torres Strait people demonstrated stewardship of the land.
- It has been said that many Aboriginal and Torres Strait people moved camp regularly, dependant on food and water supply.

Students discuss this statement in small groups and further investigate to determine the accuracy of this statement. (Reading, appropriate video clips, guest speaker)

See Learning Experience in The Humanities: History & Geography, The Technologies and Health and Physical Education

- It has been said that Aboriginal people in remote areas may be able to find water in seemingly dry ground.

Students discuss this statement in small groups and further investigate to determine the accuracy of this statement. (Reading, appropriate video clips, guest speaker)

- Water Witcher by Jan Ormerod - picture story book introduces water witching/dowsing

- Finding water

A lot of Australia is covered by desert or semi-arid land. Indigenous Australians survived in this dry continent for thousands of years. They survived by finding water using different methods.

Sometimes there is a lot of water underground. Some groups of Indigenous Australians dug wells and tunnels to find this water. If a group was moving away from a water supply, animal skins were made into bags that could carry water.

Aboriginal people looked at where birds and animals found water. They followed dingos to rock pools or watched where ants went underground. They also knew that where there were lots of trees there must be water underground.

http://www.skwirk.com/p-c_s-1_u-287_t-705_c-2638/how-aboriginal-and-torres-strait-islander-people-met-their-basic-needs/nsw/hsie/places:-then,-now-and-tomorrow/australia-before-1788

The term soakage refers to water that seeps into the sand, and is stored below, sometimes as part of an ephemeral river or creek. Soakages were important sources of water for Aboriginal people in the desert. They would scoop out the sand or mud using a coolamon or woomera, often to a depth of several metres, until clean water gathered in the hole. Knowing the precise location of each soakage was extremely valuable knowledge.

- Students explore the function of a coolamon or woomera in retrieving water and create a scientific poster, including:
  - a diagram of a coolamon or woomera containing labelled parts
  - a short procedural text for retrieving water
  - examples of use

Suggestions for Formative Assessment:

- Satisfactory participation in class discussions
- Satisfactory completion of woomera / coolamon scientific poster, including:
  - labelled diagram
  - procedural text for use
  - examples of use

Domain: Technologies

Strands: Design and Technologies

Technologies and Society

- Recognise the role of people in design and technologies occupations and explore factors, including sustainability, that impact on the design of solutions to meet community needs

TECHNOLOGIES CONTEXTS

Food and fibre production

- Investigate food and fibre production used in modern or traditional societies

Food specialisations

- Investigate food preparation techniques used in modern or traditional societies

Materials and technologies specialisation

- Investigate the suitability of materials, systems, components, tools and equipment for a range of purposes

CREATING DESIGNED SOLUTIONS

Investigating

- Critique needs or opportunities for designing and explore and test a variety of materials, components, tools and equipment and the techniques needed to create designed solutions

Producing

- Select and use materials, components, tools and equipment using safe work practices to produce designed solutions

Evaluating

- Evaluate design ideas, processes and solutions based on criteria for success developed with guidance and including care for the environment and communities

Planning and Managing

- Plan a sequence of production steps when making designed solutions

DIGITAL TECHNOLOGIES

Digital Systems

- Explore a range of digital systems with peripheral devices for different purposes, and transmit different types of data

Data and information

- Collect, access and present different types of data using simple software to create information and solve problems
- Individually and with others, plan, create and communicate ideas and information safely, applying agreed ethical and social protocols

Learning Experiences may include:

Adaptation – tools and technology

Tools and implements reflect the geographical location of different groups. For example, coastal tribes used fishbone to tip their weapons, whereas desert tribes used stone tips. While tools varied by group and location, Aboriginal people all had knives, scrapers, axe-heads, spears, various vessels for eating and drinking, and digging sticks.

Aboriginal people achieved two world firsts with stone technology. They were the first to introduce ground edges on cutting tools and to grind seed. They used stone tools for many things including: to make other tools, to get and prepare food, to chop wood, and to prepare animal skins.

After European discovery and English colonisation, Aboriginal people quickly realised the advantages of incorporating metal, glass and ceramics. They were easier to work with, gave a very sharp edge, and needed less re-sharpening. http://www.australia.gov.au/about-australia/australian-story/austn-indigenous-cultural-heritage

- Using Tony Ryan's THINKERS KEYS The Different Uses Key... Find 4 different uses that Aboriginal and Torres Strait people found for a rock.

  It is suggested that students make a photographic/video journal of this experience
- Students identify the tools and implements of the local Aboriginal people, and explain the way these tools met the community's needs. Compare the tools and implements Aboriginal people used to find food and water with the tools and implements we use today (for example a rock used to dig for edible roots compared to a shovel digging for garlic, or a coolamon and animal skin pouch for collecting water compared to a tap and bucket).

  Students consider the energy needs in using traditional and contemporary tools and implements. If appropriate, student could attempt to recreate one of these tools.

  It is suggested that students make a photographic/video journal of this experience

- Some Aboriginal and Torres Strait Islander people utilised vegetation to create baskets of a variety of sizes and use. Investigate which indigenous and/or native vegetation would be most suitable to create these baskets in your local area and endeavour to make one for a selected purpose. Students may work in small groups with a combined purpose in mind.

  It is suggested that students make a photographic/video journal of this experience

- Students will collect their data and findings throughout the Adaptation – tools and technology learning experiences. These can be recorded digitally to become their presentation assessment task.

These learning experiences in The Technologies will combine in the completion of a presentation from students to the class.

The Humanities learning experiences may add to their knowledge and help with investigations.

Suggestions for Formative Assessment:

- Satisfactory completion of 'Adaption – tools and technologies' digital/ presentation, according to class designed rubrics, including:
  - identification of the tools and implements of the local Aboriginal and Torres Strait Islander people
  - detailed explanation of the way this tool met the community's needs
  - comparison to tools and implements used today
  - adequate research to direct the completion of a functional article (SU-Cs) (DiT- Di)

Biodiversity

Energy

Waste & Recycling

Water

	Domains:		Strands/Sub Strands:
A	The Arts	D	Dance
		Dr	Drama
		MA	Media Arts
		M	Music
		VA	Visual Arts
CCT	Critical and Creative Thinking	QP	Questions and Possibilities
		R	Reasoning
		M	Metacognition
E	English		Reading and Viewing
EC	Ethical Capability	UC	Understanding Concepts
		DMA	Decision Making and Actions
HPE	Health and Physical Education		
H	The Humanities	CC	Civics and Citizenship
		EBL	Economics and Business Levels
		G	Geography
		GCS	Geographical Concepts and Skills
		GK	Geographical Knowledge
		H	History
		HCS	Historical Concepts and Skills
		HK	Historical Knowledge
IC	Intercultural Capability	CP	Cultural Practices
		CD	Cultural Diversity
M	Mathematics	NA	Number and Algebra
		MG	Measurement and Geometry
		SP	Statistics and Probability
PSC	Personal and Social Capability	SAM	Self-Awareness and Management
		SoAM	Social Awareness and Management
S	Science	SU	Science Understanding
		Bs	Biological sciences
		Cs	Chemical sciences
		ESs	Earth and Space sciences
		Ps	Physical sciences
		SIS	Science Inquiry Skills
T	Technologies	DT	Design Technologies
		Ts	Technologies and society
		Tc	Technologies context
		Cds	Creating designed solutions
		DiT	Digital Technologies
		Ds	Digital systems
		Di	Data and information
		Cds	Creating digital solutions

LEVEL:

Five & Six

UNIT:

Our Sustainable Planet — "A Recipe for Change"

BIG QUESTION/INQUIRY:

Why is it important that we live on our planet in a way that is environmentally sustainable, and what can we do as young custodians to safeguard our planet?

RATIONALE:

As global citizens, we are challenged to identify the unique aspects of this sometimes vulnerable planet. Major issues we are facing, including pollution, global warming, the lack of fresh water and loss of biodiversity, encourage us to use our influence to develop respectful relationships with animals, their habitats, plants, the land, the seas, the rivers, in this one community of life on earth.

MAJOR ASSESSMENT TASK:

Students independently create a presentation for a Parents and Friends Showcase that outlines their 'Recipe for Change'...

Students will be assessed on their use of digital technologies for: internet research, creation of charts/graphs for the purpose of data recording, labelled diagrams, photography.

Their presentation may include two or more of the following: posters, a PowerPoint presentation, photographs, videos, an IMovie, a three dimensional model, visual and performance artworks.

Domain: The Arts

Strands: Dance/Drama/Media Arts/Music/Visual Arts

Present and Perform:

- Perform devised and scripted drama that develops narrative and uses performance styles and design to engage an audience

Present and Perform:

- Plan, produce and present media artworks for specific purposes using responsible media practices

Respond and Interpret:

- Explain how aspects of the elements of music are combined to communicate ideas, concepts and feelings by comparing music from different cultures, times and locations

Explore and Express ideas:

- Explore visual arts practices as inspiration to create artworks that express different ideas and beliefs

Learning Experiences may include:

- Rehearse and perform a play about environment/pollution.
  Some suggestions: Night of the Wild Geese (Judith Crabtree), The Ant's Picnic (S Taylor & K Densley).

- Students "step into the shoes of another" and experience life from another perspective. E.g. a young person living in a community where they have to earn money to support their family by scavenging at local tip. (Role Play).

- After conducting individual research on a chosen sustainability topic, students present their findings through:
  - Creating a video clip on chosen topic to inform audience about issues. E.g. littering in school grounds affects waterways or damming rivers/ irrigation leads to salinity; OR
  - Creating a video advocating the use of wind turbines/solar panels.

- Listen to and compare various compositions about the seasons, weather, rain, water, wind. Teachers, do not give titles of composition. After listening ask: "What nature scenes was the composer depicting in this music?" "What aspects of the music suggested this?"

Some examples:

Four Seasons - Vivaldi.

Kakadu (1988) for Orchestra. Peter Sculthorpe -

https://www.youtube.com/watch?v=N2qqj1_ILyA

Mangrove (1979) / Peter Sculthorpe (Australia) https://www.youtube.com/watch?v=ucgYOMS7Kro

Antarctica - Music by Josh Wynter

https://www.youtube.com/watch?v=zn0vQFR6SCs

Vangelis - **Theme from Antarctica**

https://www.youtube.com/watch?v=GOwunilgYXM

- Using techniques from a chosen visual art field to express their feelings as a result of listening to the music, students create an individual artwork. e.g. Sculpture; painting; collage; textile art.

Suggestions for Formative Assessment:

- Student particpation in planning, rehearsing and presenting the play utilising skills gained during drama sessions.
- Students able to maintain character throughout role play.
- Video clip contians appropriate and accurate information. It has been created utilising the skills learned during meda arts lessons.
- Rubric could be created based on learned skills/research content.
- Particpation in class responses to questions regarding music – completion of the follow up Visual Arts activity.
- Appropriate use of techniques and materials in Art piece, as learned during Visual Art lessons.

Domain: Critical and Creative Thinking

Questions and Possibilities

- Identify and form links and patterns from multiple information sources to generate non-routine ideas and possibilities

Reasoning

- Investigate common reasoning errors including contradiction and inconsistency, and the influence of context
- Consider the importance of giving reasons and evidence and how the strength of these can be evaluated

Meta Cognition

- Investigate thinking processes using visual models and language

Learning Experiences may include:

GLOBAL perspective

1) Explore the principles for sustainability as presented by the Earth Charter (www.earthcharter.org). Choose one of the 16 points and create a poster/brochure/ video clip/PowerPoint to advertise this important aspect of sustainability. Remember to use graphics and text to explain your point of view. (Individual work).

2) What reasons and evidence are given that:

- creating dams is good/bad for the natural world
- installing solar power is too expensive
- water tanks are the best way to conserve water
- purchasing green power is too expensive
- Present the evidence in the form of a graphic organiser e.g. concept map/ Venn diagram. (Pair/small group work).

3) Use a 'think, pair, share' process to respond to and give information about an issue such as:

- pollution: oil spills
- pollution: ocean gyre garbage patches
- use of coal for electricity,
- cutting down forest to grow other trees. (Large group work).

See Learning Experiences in Ethical Capability

Suggestions for Formative Assessment:

- Completed advertisement using criteria and class determined rubric.
- Accurate completion of graphic organiser – utilising a class prepared rubric to ensure both sides of issue are presented.
- Final presentation from group including thinking of all members of the group. Did group work well together? Did they achieve the objective of exploring and presenting accurate information?

Domain: English

Reading and Viewing

Reading and Viewing involves students understanding, interpreting, critically analysing, reflecting upon, and enjoying written and visual, print and non-print texts. It encompasses reading and viewing a wide range of texts and media, including literary texts. Reading involves active engagement with texts and the development of knowledge about the relationship between them and the contexts in which they are created. It also involves the development of knowledge about a range of strategies for reading.

Writing

Writing involves students in the active process of conceiving, planning, composing, editing and publishing a range of texts. Writing involves using appropriate language for particular purposes or occasions, both formal and informal, to express and represent ideas and experiences, and to reflect on these aspects. It involves the development of knowledge about strategies for writing and the conventions of Standard Australian English.

Speaking and Listening

Speaking and Listening refers to the various formal and informal ways oral language is used to convey and receive meaning. It involves the development and demonstration of knowledge about the appropriate oral language for particular audiences and occasions, including body language and voice. It also involves the development of active-listening strategies and an understanding of the conventions of different spoken texts.

Learning Experiences may include:

Reading

- Teachers and students are encouraged to read appropriate texts in the area of sustainability. These can include both fiction and non-fiction texts in a variety of genres. For example, A Forest by Marc Martin.

Writing

- Students are encouraged to write appropriate texts in the area of sustainability. These can include both fiction and non-fiction texts in a variety of genres.
- Students write a text describing how a sustainability project could benefit their school. For example, solar or wind generation, water tanks for flushing toilets, or collection of rain water to a frog bog or wetland.

Speaking and Listening

- Students are encouraged to present both formal and informal presentations on sustainability.
- Students are encouraged to listen to and respond to a variety of formal and informal presentations on sustainability.

Students could present their ideas about sustainability projects at their school in a forum where the audience (class) has the opportunity to ask questions and receive responses.

Using the following genres and processes may assist students in this unit:

- Procedural Text
- Narrative Text
- Explanatory Text

Group Reading

- Scientific language

Oral language:

- Debate
- Oral presentation to audience
- Vocabulary
- Questions
  - Clarifying
  - Complex
  - Wondering
- Giving Reasons...
- Explanations

These Language Modes are immersed throughout all Learning Experiences listed in varying degrees.

Suggestions for Formative Assessment:

Domain: Ethical Capability

Understanding Concepts

- Discuss how ethical principles can be used as the basis for action, considering the influence of cultural norms, religion, world views and philosophical thought on these principles

Decision Making and Actions

- Explore the significance of 'means versus ends' by considering two ways to act when presented with a problem: one that privileges means and one ends
- Discuss the role and significance of conscience and reasoning in ethical decision-making

Learning Experiences may include:

GLOBAL perspective

- Students explore the following:

"We depend on our environment and the way we live impacts upon it. As custodians we are called to be resourceful and innovative to make our environment sustainable."

– What do you think this statement means?

– How can you/we make sure that this happens?

– Is it really our responsibility – or someone else's? Why?

See Learning Experiences in Critical and Creative Thinking

- Students explore Earth Charter Principle number nine, "Eradicate poverty as an ethical, social and environmental imperative" through investigating a story of a child/family living in poverty in a third world country.
(Useful resources can be found at World Vision, Caritas, Save the Children, Oxfam ...)
- As a result, students devise a means of supporting these families. Consider how what we think of as waste could be of use to others. For example, how your school can reuse furniture and other materials at the school for local communities, and/or raise funds for a local charity or a community group around the world.

See Learning Experiences in Health and Physical Education, Humanities – Economics

See Learning Experiences in Humanities – History

Suggestions for Formative Assessment:

Students devise a creative way of fundraising to support a family living in poverty according to class created rubric

Domain: Health and Physical Education

Strands: Personal, Social, Community Health

Being healthy, safe and active

- Plan and practise strategies to promote health, safety and wellbeing

Communicating and interacting for health and wellbeing

- Recognise how media and important people in the community influence personal attitudes, beliefs, decisions and behaviours

Contributing to healthy and active communities

- Explore how participation in outdoor activities supports personal and community health and wellbeing creates connections to the natural and built environment

Learning Experiences may include:

- Examine health issues affecting people in different places e.g. diseases spread by mosquitoes, and how these may be changing as a result of a changing climate.

  OR

- Explore the health and physical wellbeing of people in other countries, including the impact of unequal access to resources – food and clean water. Create a power point presentation to share their findings with their peers.

See Learning Experiences in Ethical Capability, The Humanities – Economics

- Explore differences in food preparation and presentation e.g. in a restaurant, fast-food outlet, café. For example, what materials go into food packaging and what waste is produced after the food is consumed, or when food is transported from different countries – how many food miles does it take to create a hamburger?

- Using Tony Ryan's THINKERS KEYS What if ... answer the question:

"What if the world's population immediately doubled?"

Suggestions for Formative Assessment:

- Completed power point presentation assessed according to content and digital technology skills (DiT Di)
- Active participation in class discussion and the satisfactory completion of Venn diagram

Domain: The Humanities

CIVICS AND CITIZENSHIP

Citizenship, Diversity and Identity

- Investigate how people with shared beliefs and values work together to achieve their goals and plan for action

ECONOMICS AND BUSINESS

Resource Allocation and Making Choices

- Identify types of resources (natural, human, capital) and explore the ways societies use them in order to satisfy the needs and wants of recent and future generations

Consumer and Financial Literacy

- Consider the effect that consumer and financial decisions of individuals may have on themselves, their family, the broader community and the natural, economic and business environment
- Economic and Business Reasoning and Interpretation
- Make decisions, identify appropriate actions by considering the advantages and disadvantages, and form conclusions concerning an economics or business issue or event

Learning Experiences may include:

- Research, devise and present an in-depth study of influential people in the world of environmental sustainability. How did they work with others to achieve their goals and plan for action? Present as a written report. Include graphics/photos where possible.

See Human Impact on the Natural World learning experience in the Humanities: Geography

- Using Tony Ryan's THINKERS KEYS The Ridiculous Key: Try to justify the statement:

"By law, every household must recycle EVERY possible piece of rubbish"

How Nude Food can reduce Waste

- Provide students with examples of common lunch box items that come in both wrapped packaging and in other forms (for example packaged yoghurt vs yoghurt portioned into small containers or fresh fruit portions vs individually packaged fruit bars).
  - Students research the cost of each portion and compare the quantity vs value for money, recording and comparing the results using numerical and column graphs.
  - Students examine the wrapped packaging of items and sort these according to the recyclable and non-recyclable packaging. Which of these items could be brought to school as Nude Food?
  - Students discuss the environmental footprint of these products and devise a school-based action plan to help promote environmentally sustainable shopping choices.
  - Students create a class action plan for a day or more each week to have Nude Food lunches with the school community.
  - Students write a letter to a local supermarket/manufacturers about their concerns with the issue of packaging creating waste.
- Based on their How Nude Food can reduce Waste research task, students begin to identify and create a recipe for change at their school.

Suggestions for Formative Assessment:

Satisfactory completion of:

- data collection,
- data analysis,
- appropriate action plan,
- advertisement and/letter (MG & SP)

Domain: The Humanities

Strands: Geography

GEOGRAPHICAL CONCEPTS AND SKILLS

Place, space and interconnection

- Describe and explain interconnections within places and between places, and the effects of these interconnections

Data and information

- Interpret maps and other geographical data and information using digital and spatial technologies as appropriate, to develop identifications, descriptions, explanations and conclusions that use geographical terminology

GEOGRAPHICAL KNOWLEDGE

Factors that shape places and influence interconnections

- Location of the major countries of the Asian region in relation to Australia and the geographical diversity within the region
- Impacts of bushfires or floods on environments and communities and how people can respond
- Environments and human influences on the location ad characteristics of places and the management of spaces within them
- Factors that influence people's awareness and opinion of places

Learning Experiences may include:

Food Miles – How Far has your Dinner Travelled?

- Working in small groups, provide students with examples of a meal (in a shopping bag place all of the ingredients needed to make the meal, and a recipe card) to determine how far each item has travelled:

1. Students unpack their shopping bag and read the recipe card to see what they are cooking.
2. Students read the package to determine where the product was produced. (Product of . . .) and locate these places on a world map.
3. Using the Food Miles Calculator (www.foodmiles.com) determine the distance travelled by each ingredient and record their findings.
4. Calculate the total miles for their meal, recording their findings.
5. As a group, create a list of plausible alternatives to the products selected. For example home grown or locally grown tomatoes could replace canned Italian tomatoes to help reduce food miles.
6. Students create a pictorial representation of their alternate shopping bag.
7. As a class discuss the effects of importing food.

Based on their Food Miles research task, students begin to identify and create a recipe for change.

Biomes – Biomes, what are they?

The world is made up of many different biomes. Biomes are large regions of the world with similar plants, animals, and other living organisms that are adapted to the climate and other conditions. A biome is made of many similar ecosystems.

www.geographypods.com/24-rainforests--deserts.html

- On a blank map of the world, students label the equator, the Northern and Southern Hemispheres, continents, oceans, the tropical, temperate and polar zones. (The following website may be useful for explaining the different zones) www.webquest.hawaii.edu/kahihi/sciencedictionary/C/climatezone.php
- There are nine designated biomes in the world: tropical forests, savanna, desert, polar and high-mountain ice, chaparral, temperate grass land, temperate deciduous forest, coniferous forest, tundra (arctic and alpine). Using the internet, students search for an image and definition of each biome, to be recorded as a digital poster or presentation.
- Students may wish to include a map of the world showing the location of the different biomes.

Based on their biomes research task, students begin to identify and create a recipe for change.

Suggestions for Formative Assessment:

Satisfactory completion of:

- data collection,
- data calculations,
- pictorial representation of their alternate shopping bag
- participation in class discussion (MG & SP)

Satisfactory completion of map, including;

- equator,
- the Northern and Southern Hemispheres,
- continents,
- oceans,
- the tropical, temperate and polar zones

Completed digital presentation demonstrating knowledge of biomes (DTDI)

Domain: The Humanities

Strands: History

HISTORICAL CONCEPTS AND SKILLS

Historical Sources as evidence

- Describe perspectives and identify ideas, beliefs and values of people and groups in the past

HISTORICAL KNOWLEDGE

Historical Knowledge: The Australian colonies –

- The nature of convict or colonial presence, including the factors that influence changing patterns of development, how the environment changed, and aspects of the daily life of the inhabitants, including Aboriginal and Torres Strait Islander peoples.

Australia as a nation

- Significant contributions of individuals and groups, including Aboriginal and Torres Strait Islander peoples and migrants, to changing Australia society

Learning Experiences may include:

Human Impact on the Natural World

Students choose one of the following topics to explore the impact on the natural environment. Their exploration must include identifying ideas, beliefs and values of people and groups, both past and present. This could include the influence of significant people, both convict, colonial, migrant or Aboriginal and Torres Strait Islander peoples.

Students will present their findings utilising a concept map, which demonstrates the event/issue and the effects this has had on both people and environment over time. A timeline may be useful to include if appropriate.

Suggested Topics

- Whaling (within Australian coastal waters)
- Fishing Industry
- Deforestation caused by
  - Mining
  - Wood chipping
  - Agriculture/Horticulture
- Great Barrier Reef
  - Mining
  - Tourism
- Extinction of animal species due to human demand
  - Palm Oil
  - Cosmetics Industry
  - Medicinal
  - Development
  - Mining
- Altering Water courses
  - building of dams
  - salinity

The impact of Colonisation and the Gold Rush could also be part of this exploration.

Based on their Human Impact on the Natural World research task, students begin to explore and identify barriers to and means of reaching understandings with and between culturally diverse groups in an effort to create a recipe for change.

Suggestions for Formative Assessment:

- Satisfactory completion of concept map which demonstrates the event/issue and the effects this has had on both people and environment over time. (EC)

Domain: Intercultural Capability

Cultural Practices

- Explain how intercultural experiences can influence beliefs and behaviours, including developing a critical perspective on and respect for their own and others cultures

Cultural Diversity

- Identify barriers to and means of reaching understandings with and between culturally diverse groups

Learning Experiences may include:

See Learning Experiences in The Humanities: Geography and The Humanities: History

Based on their research tasks, students begin to explore and identify barriers to and means of reaching understandings with and between culturally diverse groups in an effort to create a recipe for change.

Suggestions for Formative Assessment:

Domain: The Languages

Students acquire communication skills in a second language. They develop understanding about the role of language and culture in communication. Their reflections on language use and language learning are applied in other learning contexts.

Learning languages broadens students' horizons about the personal, social, cultural and employment opportunities that are available in an increasingly interconnected and interdependent world. The interdependence of countries and communities requires people to negotiate experiences and meanings across languages and cultures.

Learning Experiences may include:

- Teachers and students are encouraged to use the language they are learning, to communicate in the area of environmental sustainability.
- This may include naming of environmental management systems in the language being learned. For example: Waste Bins also labelled in the second language, garden areas/ implements named in second language, language teacher using sustainability theme in vocabulary learning and teaching, and an Indigenous Food Garden labelled with the local Aboriginal language/s.
- It should also involve the culture and country of the language, in research activities being implemented throughout the unit. For example: comparing the Extreme Weather and Geographical Changes that occur in the country of second language to Australia.

Suggestions for Formative Assessment:

Domain: Mathematics

MEASUREMENT AND GEOMETRY

Using units of measurement

- Choose appropriate units of measurement for length, area, volume, capacity and mass L5
- Calculate the perimeter and area of rectangles and the volume and capacity of prisms using familiar metric units L5
- Convert between common metric units of length, mass and capacity L6
- Solve problems involving the comparison of lengths and areas using appropriate units L6

Location and transformation

- Use a grid reference system to describe locations. Describe routes using landmarks and directional language L5

STATISTICS AND PROBABILITY

Chance

- List outcomes of chance experiments involving equally likely outcomes and represent probabilities of those outcomes using fractions L5
- Conduct chance experiments with both small and large numbers of trials using appropriate digital technologies L6

Data representation and interpretation

- Pose questions and collect categorical or numerical data by observation or survey L5
- Construct, interpret and compare a range of data displays, including side-by-side column graphs for two

Learning Experiences may include:

See Learning Experiences in all of the other domains, particularly mapping and timeline Learning Experiences in The Humanities.

The following Learning Experiences include a wide range of Mathematical knowledge and skills:

1. How Nude Food can reduce Waste
2. Food Miles
3. Biomes
4. Human Impact on the Natural World

Suggestions for Formative Assessment:

See Assessment Tasks in linked Learning Experiences

Domain: Personal and Social Capability

SELF-AWARENESS AND MANAGEMENT

Recognition and expression of emotions

- Explore the links between their emotions and their behaviour

Development of resilience

- Identify the skills for working independently and describe their performance when undertaking independent tasks

SOCIAL AWARENESS AND MANAGEMENT

Relationships and diversity

- Define and recognise examples of stereotypes, discrimination and prejudice and discuss how they impact on the individual

Collaboration

- Identify the characteristics of an effective team and develop descriptions for particular roles including leadership, and describe both their own and their team's performance when undertaking various roles

Learning Experiences may include:

See Learning Experiences in Health and Physical Education

See Learning Experiences where students are working in small groups

Suggestions for Formative Assessment:

Domain: Science

SCIENCE UNDERSTANDING

Science as human endeavour

- Scientific understandings, discoveries and inventions are used to inform personal and community decisions and to solve problems that directly affect people's lives

Biological sciences

- The growth and survival of living things are affected by the physical conditions of their environment

Earth and space sciences

- Sudden geological changes or extreme weather conditions can affect Earth's surface

Physical sciences

- Energy from a variety of sources can be used to generate electricity, electric circuits enable this energy to be transferred to another place and then to be transformed into another form of energy

SCIENCE INQUIRY SKILLS

Questioning and predicting

- With guidance, pose questions to clarify practical problems or inform a scientific investigation, and predict what the findings of an investigation might be based on previous experiences or general rules

Planning and conducting

- With guidance, plan appropriate investigation types to answer questions or solve problems and use equipment, technologies and materials safely, identifying potential risks

Recording and processing

- Construct and use a range of representations, including tables and graphs, to record, represent an describe observations, patterns or relationships in data

Analysing and evaluating

- Compare data with predictions and use as evidence in developing explanations

Communicating

- Communicate , ideas and processes using evidence to develop explanations of events and phenomena and to identify simple cause-and-effect relationships

Learning Experiences may include:

Extreme Weather and Geographical Changes

- Students choose one of the following topics to explore the impact on the natural environment using digital technologies. Students will present their findings through a three dimensional model of their topic plus a scientific poster explaining their research. The location of where these events have occurred over the past ten years could be marked on a world map, if appropriate. A timeline may be also useful to include.

Suggested Topics –

- Bushfires
- Cyclones/Typhoons
- Tsunami/Tidal Waves
- Floods
- Drought
- Earthquake
- Volcanic Eruptions
- Sink Holes
- Tornadoes

- Using Tony Ryan's THINKERS KEYS
  What if Thinker's Key

What if we could utilise these forces of nature to provide energy, water or waste management resources, rather than disturb the natural world as we currently do?

For example:

– tapping into the energy provided by sun rather than mining for and burning coal to provide electricity for our homes.

- Using Tony Ryan's THINKERS KEYS
  The Inventors Key

Design a means of transporting flood water to places of drought

Suggestions for Formative Assessment:

Satisfactory completion of three dimensional model and scientific poster to be assessed according to class created rubric.

Domain: Technologies

Strands: Design and Technologies

Technologies and Society

- Investigate how people in design and technologies occupations address competing considerations, including sustainability, in the design of solutions for current and future use

TECHNOLOGIES CONTEXTS

Food and fibre production

- Investigate how and why food and fibre are produced in managed environments

Food specialisations

- Investigate the role of food preparation in maintaining good health and the importance of food safety and hygiene

DIGITAL TECHNOLOGIES

Data and information

- Acquire, store and validate different types of data and use a range of software to interpret and visualise data to create information
- Plan, create and communicate ideas, information and online collaborative projects, applying agreed ethical social and technical protocols

Learning Experiences may include:

See Learning Experience in Science – The Inventors Key

- Using Tony Ryan's THINKERS KEYS The Prediction Key

Cotton is a fibre that requires high levels of water – is this a sustainable source of fibre for a sustainable world? Will we use it in the future?

- Highlight the positives of having packaged food compared to the negative aspects. Use a T Chart to present your findings.

See Learning Experiences in Health and Physical Education

The following Learning Experiences include a wide range of Digital Technologies understanding, knowledge and skills:

1. How Nude Food can reduce Waste
2. Food Miles
3. Biomes
4. Human Impact on the Natural World
5. Extreme Weather and Geographical Changes

- Based on the above research tasks, students begin to identify and create a recipe for change.

Suggestions for Formative Assessment:

- Satisfactory completion of T Chart
- Use of digital technologies for:
  - internet for research
  - creation of charts/graphs for the purpose of data recording
  - labelled diagrams
  - graphics organisers
  - posters
  - Power Point Presentation
  - Photography
  - Videos
  - Creating an IMovie

Biodiversity

Energy

Waste & Recycling

Water

	Domains:		Strands/Sub Strands:
A	The Arts	D	Dance
		Dr	Drama
		MA	Media Arts
		M	Music
		VA	Visual Arts
CCT	Critical and Creative Thinking	QP	Questions and Possibilities
		R	Reasoning
		M	Metacognition
E	English		Reading and Viewing
EC	Ethical Capability	UC	Understanding Concepts
		DMA	Decision Making and Actions
HPE	Health and Physical Education		
H	The Humanities	CC	Civics and Citizenship
		EBL	Economics and Business Levels
		G	Geography
		GCS	Geographical Concepts and Skills
		GK	Geographical Knowledge
		H	History
		HCS	Historical Concepts and Skills
		HK	Historical Knowledge
IC	Intercultural Capability	CP	Cultural Practices
		CD	Cultural Diversity
M	Mathematics	NA	Number and Algebra
		MG	Measurement and Geometry
		SP	Statistics and Probability
PSC	Personal and Social Capability	SAM	Self-Awareness and Management
		SoAM	Social Awareness and Management
S	Science	SU	Science Understanding
		Bs	Biological sciences
		Cs	Chemical sciences
		ESs	Earth and Space sciences
		Ps	Physical sciences
		SIS	Science Inquiry Skills
T	Technologies	DT	Design Technologies
		Ts	Technologies and society
		Tc	Technologies context
		Cds	Creating designed solutions
		DiT	Digital Technologies
		Ds	Digital systems
		Di	Data and information
		Cds	Creating digital solutions

Suggested Resources

These are only a few of many resources which could be used in Education for a Sustainable future learning experiences.

TEACHER SUPPORT MATERIALS

Title	Author	Year	Publisher	Synopsis
ResourceSmart Schools www.sustainability.vic.gov.au/services-and-advice/schools	N/A	Current	Australian Sustainable Schools Initiative Sustainability Victoria	Through the ResourceSmart Schools program, schools can take action to minimise waste, save energy and water, promote biodiversity and reduce greenhouse gas emissions. ResourceSmart Schools also helps Victorian school students and teachers show leadership in climate change through practical and achievable actions.
Victorian Curriculum http://victoriancurriculum.vic.edu.au/	N/A	2016	Victorian Curriculum and Assessment Authority (VCAA)	The Victorian Curriculum Foundation to 10 (F-10) establishes what every student should be learning from Foundation to Year Ten. The curriculum has been established as a step towards lifelong learning, social development and active and informed citizenship and is the common set of knowledge and skills essential for all students.
How to succeed with **Education for Sustainability** Little Books of Big Ideas	Josephine Lang	2007	Curriculum Corporation	This resource is written for teachers to help them develop skills and knowledge within themselves, their students and the school community in an endeavour to create an environmentally sustainable school community. It links social justice, cultural diversity and good governance to education for sustainability.
Education for a Sustainable Future: A National Environmental Education Statement for Australian Schools	Tony Cook	2005	The Australian Government Department of The Environment and Heritage	Education for sustainability is a concept which should be implemented throughout all schools. This resource offers some ideas to assist teachers, schools and school communities in this task.
Sustainability Curriculum Framework: A Guide for Curriculum Developers and Policy Makers		2010	The Australian Government Department of The Environment, Heritage and the Arts	Education for sustainability should be implemented from Foundation to Year 10. This resource offers information and guidance to school communities and teachers on how to structure a developmental program for students.
Kitchen Table Sustainably	Wendy Sarkissian	2009	Earth Scan Publication: London	This book looks at education for sustainability through the lens of community engagement. The heart of the book approaches sustainability from the 'bottom up', with the community engaging through components of Education, Action, Trust, Inclusion, Nourishment and Governance – EATING.

Suggested Resources

TEACHER SUPPORT MATERIALS				
Title	**Author**	**Year**	**Publisher**	**Synopsis**
Global Perspectives A statement for global education for Australian schools	Lan Wang Editor	2002	Curriculum Corporation	Global Perspectives: a Statement on Global Education for Australian Schools offers a concise, practical and philosophical guide to the aims and themes of global education as it has developed in Australia.
Drama Australia: : Aboriginal and Torres Strait Islander Guidelines for Drama/Theatre Education www.dramaaustralia.org.au/assets/filesATSIg	Drama Australia	2007	Drama Australia	Approaching Indigenous and Torres Strait Islander understandings and issues can often be a challenging and difficult task for teachers. This resource offers a variety of ways of approaching texts created by Indigenous Australians.

PICTURE STORY BOOKS

Title	Author	Year	Publisher	Synopsis
The Very Hungry Caterpillar	Eric Carle	1969	Penguin Putnam	The story tells us of a baby caterpillar who, after hatching from the egg finds that he is so hungry that for five days all he does is eat. After a while he has eaten so much that he feels unwell and so spins himself a cocoon, where he remains for some time, before emerging as a brightly coloured butterfly
Where the Forest meets the Sea	Jeannie Baker	1990	Walker Books	When visiting a tropical rainforest, a young boy imagines that he is living in a time of extinct and unique animals. He pretends that aboriginal children are playing there and wonders how much longer the rainforest might survive?
The Giving Tree	Shel Silverstein	-	Harper & Row	This book describes the friendship between a boy and a tree. It tells us of the boy's growth and development from childhood to old age and how the tree supports him through all the major events in the boy's life.
The Water Hole	Graeme Base	2003	Penguin Books	A story in rhyme and number, of the animals gathering at a water hole through the different weather and the different seasons
The Tiny Seed	Eric Carle	1991	Ashton Scholastic	This book tells the story of a small seed that is carried by the autumn wind to places new. We hear of other seeds that are dropped into the sea, burned by the sun or eaten by birds. Many seeds are stepped upon or picked, but this seed survives and grows into a beautiful flower that in turn creates new seeds which are carried off by the wind.
The Story of Rosy Dock	Jeannie Baker	1995	Greenwillow	The author of this story wants readers to become aware of what can happen when introduced plants are allowed to grow and spread throughout the land and endanger the native plants and animals of the country
Lester and Clyde	James H Reece	1991	Ashton Scholastic	This rhyming story tells the story of young Lester the frog who has been sent away by his older friend Clyde to find a new home. However, his travels take him to places that are full of garbage, and ponds that are gooey, slimy and sticky. He decides to return home to their peaceful pond surrounded by fresh air and treat his older friend with more respect. The colorful vocabulary gives young readers an interesting lesson of conservation.
Lester and Clyde Running Scared	James H Reece	1995	Ashton Scholastic	This second story in the Lester and Clyde series tells us of their beautiful pond being destroyed by machines and the journey which follows as they search for a new home.

PICTURE STORY BOOKS

Title	Author	Year	Publisher	Synopsis
Window	Jeannie Baker	1991	Greenwillow	This book has no words, yet explores the concept of change through the eyes of Sam and the changing view as seen through a window. The original outlook of sky and wilderness changes to one of a growing city and finally to a scene showing a sign advertising housing blocks for sale.
The Faraway Seed	Anna Boucatt	2009	JoJo Publishing: Melbourne Australia	This story tells us of plants that are introduced into an environment where they are not native. It can also be interpreted as a story about people who come from another country and bring with them much to share with those already living in this land. At some time we were all "seeds from a faraway place".
Belonging	Jeannie Baker	2004	Walker Books	Belonging is a wordless picture book and companion to Window. This book explores the rescuing of a city street as seen through Tracy's window. It not only explores the re-greening of a city, but the role of the community as it is empowered to take on the responsibility of changing the environment.
The Lorax	Dr Seuss	1971 2012	Random House Harper Collins	Dr Seuss has captured the imaginations of both young and young at heart with this exceptional tale of the negative impact economic growth, consumerism and greed can have on the environment. With the help of the Lorax, the guardian of the trees, we are able to see the impact of deforestation and how the beliefs of one little boy can have a huge impact on the natural world.
Isabella's Garden	Glenda Millard & Rebecca Cool	2012	Walker Books Australia	This story explores growth, seasonal change and the beginning and ending of the life of a seed – how they blossom, grow and eventually lead to new life.
Don't Throw That Away	Lara Bergen	2009		This book explores all the wonderful things you can do with "rubbish". Reuse it in all kinds of creative ways.
The Earth and I	Frank Asch	1994		This story rejoices in the friendship that one child has with the Earth. They listen to each other, play together and care for each other. However, when the Earth becomes sad the child tries to find a way to make it happy again.
The Thirsty Flowers				This book investigates the necessities of plant life and the relationship between plants and humans.

PICTURE STORY BOOKS

Title	Author	Year	Publisher	Synopsis
Michael Recycle	Ellie Bethel	2008	IDW Publishing	This story is about a young superhero who is able to teach people about recycling. Michael Recycle shows a community how to clean up the town and is declared the "Green Caped Crusader".
Litterbug Dough	Ellie Bethel	2008	IDW Publishing	Michael Recycle helps Doug to change his wasteful, messy, lazy and littering ways.
Michael Recycle and The Treetop Cops	Ellie Bethel	2012	IDW Publishing	When on vacation in the Great Redwood Forest, Michael Recycle and the tree-top cops save the day when the forest is under threat.
Charlie and Lola: We are Extremely Very Good Recyclers	Lauren Child and Bridgit Hurst	2009	Dial Books for Young Readers	Lola asks her classmates to assist her in a competition to recycle her old toys. She has discovered the competition when her friend Charlie convinces her not to throw the toys away. The prize for the winner is a real live tree for her to plant.

SCRIPTED PLAYS

Title	Author	Year	Publisher	Synopsis
Night of the Wild Geese (in Imagine This... A reader's theatre resource book. M.Robertson & B. Poston-Anderson	Judith Crabtree	1995	Hodder Children's Books Australia	An ecological theme is at the centre of this story of enchantment and magic. By the end of this haunting tale we the audience believe that the Geese are indeed our brothers.
The Ant's Picnic (in 10 in one: A collection of plays.	Steve Taylor & Kevin Densley	1997	Radical Wombat Collective	This play is about just one day in the life of the Ant family ... Mum and Dad, Suffishy Ant, Conveny Ant and Brilly Ant

VIDEO CLIPS/FILMS

Title	Music	Year	Length	Synopsis
NB At no time should these following videos be used in full – as most require parent permission. It is important for teachers to use only 'snippets' of the film to demonstrate an aspect of learning. Often you can find appropriate segments of the film as You Tube clips.				
Happy Feet (Warner Bros)	John Powell	2006	1 hr 48 mins	In Antarctica, the young emperor penguin Mumble needs to be able to sing if he wishes to attract a mate. However, Mumble expresses himself through tap-dancing, as he has such a dreadful voice, and charms the female penguins through his dance.
Happy Feet 2 (Warner Bros)	John Powell	2011	1 hr 58 mins	Mumble is now known as the Master of Tap, but his son Erik is averse to dancing. He runs away from home meeting a penguin that can fly – the Mighty Sven. It is not until their world is disturbed by powerful forces, that Mumble is able to compete with Erik's new role model.

Suggested Resources

VIDEO CLIPS/FILMS

Title	Music	Year	Length	Synopsis
It's a Bugs Life (Pixar Animation Studios Walt Disney Pictures)	Randy Newman	1998	1hr 35 mins	Wanting to save his ant colony from destruction by grasshoppers, an ant enlists what he thinks are warrior bugs, but in fact are members of a circus troupe
The Lorax by Dr Seuss (Universal Studios)	John Powell	2012	1hr 35 mins	In his endeavour to win the heart of Audrey, twelve year old Ted must investigate the story of the Lorax. Living in a town – Thneedville – which is lacking in trees and flowers, it will be difficult to find what Audrey most desires – a Truffula tree. This lack of nature has been caused by the greed of the Onceler, who no longer cares about nature or the environment.
Finding Nemo (Pixar, Walt Disney Pictures & Disney Enterprise)	Thomas Newman	2003	1hr 40 mins	Marlin is exceedingly vigilant with his son Nemo – both clown fishes living in the sea. Nemo wants to prove to his father that he is able to care for himself and swims too close to the surface – where he is captured by a diver. On his travels to free Nemo, Marlin meets Dory who, despite having a short memory, agrees to help him in his search. On the way they face many dangers including sharks and jelly fish as they endeavour to free Nemo from a dentist's fish tank.
Fern Gully (20th Century Fox)	Alan Silvestri	1992	1 hr 16 mins	Ferngully is a rainforest in Australia where lives a fairy called Crysta. Believing that humans are extinct, she is amazed when a logging company comes to the forest. Accidently she shrinks a young boy called Zak, who, when he realises the damage that logging does to the forest, tries to stop the destructive work.
The Ant Bully (Warner Bros and Legendary Pictures)	John Debney	2006	1 hr 28 mins	Lucas has been attacking the ant colony. Tired of these attacks the ants shrink him to their size and cause him to live with them until he learns what he has done. Directed by the ants, Lucas discovers a world he never knew existed.
Antz (DreamWorks Animation)	John Powell and Harry Gregson-Williams	1998	83 minutes	Z-4195 is a worker ant who wants to be noticed by princess Bala. He changes roles with his friend Weaver, a soldier ant, hoping to see Bala during a parade. Regrettably war breaks out, helping Z to become a hero, and thus he starts to spread the idea of individuality in the nest.
The Bee Movie (DreamWorks Animation & Paramount Pictures)	Rupert Gregson-Williams	2007	91 minutes	When Barry B Benson graduates from "bee college", he is disappointed at his only career choice: making honey. One day as he travels outside the hive, Vanessa (a florist) saves Barry's life. They becomes friends and when Barry finds that people actually eat honey he decides to take them to court.

VIDEO CLIPS/FILMS

Title	Music	Year	Length	Synopsis
An Inconvenient Truth – Al Gore	Michael Brook	2006	96 minutes	This documentary is about former US Vice President Al Gore's campaign to educate people about global warming. It comprises a comprehensive slide show and has been credited for raising awareness of global warming and the need for environmental sustainability.
Wild Kitchen with Clayton Donovan: ABC TV	N/A	2016	- series -	This TV series shadows Indigenous chef Clayton Donovan as he journeys through the Indigenous nations of the region, visiting farms and providers to obtain the freshest ingredients for his appetising recipes.
Tasty bush tucker by ABC Gardening Australia http://splash.abc.net.au/home#!/media/30798/understanding-bush-foods	N/A	2010	4:14	Clarence Stockee explores the Royal Botanic Gardens in Sydney discovering plants used by Indigenous Australians. Find out about these native Australian bush foods and how to prepare them safely.
Food Safari – A Look At Bush Tucker SBS http://www.sbs.com.au/food/video/20651587800/Food-Safari-A-Look-At-Bush-Tucker	N/A	2013	- series -	Maeve O'Meara, host of Food Safari is given a tour of Neville's "supermarket" and "chemist", out in the bush.

Suggested Resources

MUSIC and SONGS			
Title	**Composer**	**Year**	**Accessed from**
"Kakadu"	Peter Sculthorpe	1988	https://www.youtube.com/watch?v=N2qqj1_ILyA
Mangrove	Peter Sculthorpe	1979	https://www.youtube.com/watch?v=ucgYOMS7Kro
Antarctica	Josh Wynter		https://www.youtube.com/watch?v=zn0vQFR6SCs
Theme from Antarctica	Vangelis		https://www.youtube.com/watch?v=GOwuniIgYXM
The 3 R's from Sing-A-Longs and Lullabies for the Film Curious George	Jack Johnston	2006	https://www.youtube.com/watch?v=dqUdI4AIDF0&list=PL36CFBB3ACFF7917E
From little things, big things grow	Paul Kelly and Kev Carmody	2014	https://www.youtube.com/watch?v=dAONlfoNVuY
From little things, big things grow	John Butler, Dan Sultan & Missy Higgins	2009	https://www.youtube.com/watch?v=QbaQ6hI0Elk
The Needs of a Plant 5 things plants need to stay alive	Harry Kindergarten Music	2014	https://www.youtube.com/watch?v=dUBIQ1fTRzI
Compost Makers Work Song	Fay White	1998	ABC Sing Book
Alexander Beetle (Forgiven by A.A. Milne)	Poem Sung by Melanie		http://allpoetry.com/poem/8518989-Forgiven-by-A.A.-Milne https://www.youtube.com/watch?v=BRSq5bWu8x8
Ugly Bug Ball (Sung by Burl Ives)	Richard M Sherman & Robert B Sherman		http://www.lyricsfreak.com/b/burl+ives/the+ugly+bug+ball_20205920.html
Soundtracks from the various videos/films as listed			

WEB SITES

Title	Description
Environment Education Victoria http://eev.vic.edu.au/resources/	Whether you have a water catchment issue at your school and need some inspiration, want to plan your next event to be more sustainable or want students to learn how to write better texts using sustainability as a theme; EEV has some fantastic resources to help you. All are available for free download.
Cool Australia www.coolaustralia.org/curriculum-materials/?gclid=CK6emPCh6coCFQslvQodVf4BRQ#body-wrapper	Based around common sustainability themes, including Energy, Water, Waste and Biodiversity, Cool Australia is a one stop shop for teachers wishing to bring sustainability into their curriculum. From learning activities to units of work, Cool Australia provides detailed, up to date curriculum materials for both teachers and students. Cool Australia also offers AuSSI audits, which are most helpful when conducting audits for ResourceSmart Schools. A brilliant interactive website that is user friendly and ever changing.
Sustainability Victoria http://www.sustainability.vic.gov.au/	Sustainability Victoria's statutory objective is to facilitate and promote environmental sustainability in the use of resources. Established under the Sustainability Victoria Act 2005, SV is a statutory authority with a board appointed by the Minister for Environment and Climate Change.
CERES – Community Environment Park http://ceres.org.au/	CERES offers a wide range of services to assist teachers with education for sustainability – in particular it is a place to visit and explore sustainability projects and procedures. For resources and case studies shared by other schools visit the CERES Sustainability Hub.
Living Sustainably: the Australian Government's National Action Plan for Education for Sustainability www.environment.gov.au/sustainability/education/publications/living-sustainably-national-action-plan	Launched in April 2009, Living Sustainably: the Australian Government's National Action Plan for Education for Sustainability, was designed to provide all Australians with the knowledge and skills required to live sustainably. The plan, which was designed and prepared by the National Council on Education for Sustainability by the Australian Government Department of the Environment, Water, Heritage and the Arts, is available to download from the website.
Kids teaching kids www.kidsteachingkids.com.au	Kids Teaching Kids aims to inspire future environmental leaders by empowering students to become confident, caring and informed citizens. Whilst raising awareness of both local and global environmental issues and driving action for change, the Kids Teaching Kids Program promotes positive wellbeing and helps build resilience in young people. Starting in the classroom and extending into the community through the Kids Teaching Kids Learning Model and Program, students are prepared to take up the challenges of saving our environment while responsibly managing their own learning through the Kids Teaching Kids Learning Model.
Landlearn www.landlearn.net.au/index.html	A state-wide educational program, LandLearn provides both structure and support for schools to incorporate sustainable land practices into the school curriculum. Based upon the studies of sustainable agriculture and natural resource management, LandLearn provides support for teachers and school communities, engages students in active, experiential learning, and promotes partnerships between school and community groups.
Zoos Australia www.zoo.org.au/education **Act Wild (Zoos Vic)** www.actwild.org.au	The Zoo's schools' programs present students with opportunities to connect with wildlife, build upon their understanding of authentic conservation issues and be inspired to take action and help save wildlife. Zoos Victoria is the world's first zoo to achieve carbon neutral certification, so what a great place for students to visit to see just how achievable being carbon neutral can be. Their sustainable practices include waste management, carbon management, energy efficiency, water saving and environmental management, in addition to their efforts to help save endangered wildlife species.

Suggested Resources

WEB SITES	
Title	**Description**
Sheppard Software www.sheppardsoftware.com/content/animals/kidscorner/foodchain/producersconsumers.htm	This website offers hundreds of free, online, educational games for kids, with numerous levels, games and activities for learners of any age. The main curriculum areas covered in this website are geography, mathematics and science.
Geography for 2016 & Beyond www.geographypods.com/24-rainforests--deserts.html	With extensive experience as a science teacher/lecturer in France and the UK, Matt Podburry has pulled together his vast knowledge and expertise in the geography curriculum in this user friendly website where he offers free classroom resources aimed specifically for students aged 11-18 years of age in the area of geography and/or science.
Melbourne Water http://education.melbournewater.com.au/	Focused on the urban water cycle, this website allows students to explore water as a resource and the biodiversity of our Victorian waterways, while helping them build their understanding of current water use issues and empowering them to make positive change. All learning activities are in line with the Victorian Curriculum areas of science and geography and the water and biodiversity modules in ResourceSmart Schools.
UNESCO www.unesco.org/education/tlsf/	UNESCO provides a multimedia teacher education program that contains 100 hours or professional learning (divided into 27 modules) for use in pre-service and in-service teacher training. This site is also well suited to the needs of curriculum developers, education policy makers and authors of educational material. Teaching and Learning for a Sustainable Future provides the support that teachers need to empower their students to develop and evaluate alternative visions of a sustainable future and to work creatively with others to help bring their visions of a better world into effect.
Planet Ark www.planetark.org	Planet Ark Environmental Foundation is an Australian not-for-profit organisation with a vision of a world where people live in balance with nature. Established in 1992, Planet Ark focuses on working collaboratively and positively to bring about a more sustainable future for all to enjoy. This website offers many positive environmental actions that you and your school can take up to help address current environmental issues.
Global Education Australia www.globaleducation.edu.au	If you are planning to enable your students to live actively as global citizens by participating in and shaping a better, shared future for the world, then this website is a must for you. Global Education Australia promotes understanding of sustainable futures and the importance of developing skills in critical and creative thinking and ethical understanding. It promotes open mindedness and a willingness to take action for change, respecting and valuing diversity, and being active in the development of a peaceful, just and sustainable world.
Scootle http://www.scootle.edu.au/ec/p/home	Aligned to the new Australian Curriculum this site holds a number of digital resources to assist teachers with implementing the central concepts and skills of the curriculum. This website requires a login so check that you are able to have access through your school system. It will definitely be worthwhile as the digital learning resources are very comprehensive.
Earth Charter Australia www.earthcharter.org.au/home	The Earth Charter strives to motivate people to develop an understanding of global interdependence and to share responsibility for the care of the Earth and the wellbeing of the human family. It is a declaration of hope, as it outlines principles for building a just, peaceful and sustainable world in the 21st century.
Learnscapes (Australia) www.learnscapes.org/	This website represents an organisation that is working towards empowering and supporting school communities to achieve their visions and create stimulating learning and play environments.

Suggested Resources

WEB SITES	
Title	**Description**
Gyre Sailors http://www.5gyres.org	5Gyres is a community that fights ocean plastic pollution through education, science and activism.
FoodMiles.com http://www.foodmiles.com/	Food miles is a means to explore the environmental impact of foods, including how food actually gets from the place where it is grown/produced to your table, and what happens to the waste – How far does this travel to the landfill area? You can find a user friendly food mile calculator tool on this site.
Links to other useful websites http://www.educationforsustainability.com.au/resources/useful-websites	This site has a number of links to other useful websites. It is the Australian Government's National Action Plan for education for sustainability and aims to prepare all Australians with the skills and knowledge they need to live in an environmentally sustainable way.

WEB SITES – Aboriginal and Torres Strait Islander	
Title	**Description**
Australian Curriculum Lessons – Dreamtime Stories www.ausraliancurriculumlessons.com.au/2013/11/09/aboriginal-dreamtime-stories-unit-year-3-4/	Traditional Aboriginal Dreamtime Stories can be explored and analysed using the lesson plans provided on this site.
Dust Echoes www.abc.net.au/dustechoes/dustEchoesFlash.htm	This website offers a great resource for Indigenous Australian dream time stories. It includes, Vocabulary/Glossary and study guides.
Story Cove by August House http://www.yotube.com/watch?v=itszep0duwl	How the Koala got his stumpy tail is just one of the dreamtime stories you can find on this site.
Map of Aboriginal Tribal territories and languages in Victoria https://commons.wikimedia.org/wiki/File:Map_Victoria_Aboriginal_tribes_(colourmap).jpg	This map of Aboriginal Tribal territories and languages in Victoria is coloured to easily identify different tribal areas.
Ngurumderi – Dreaming of the Ngarrindjeri People Murray River (Discover Murray – Austraia's Great River) www.murrayriver.com.au/about-the-murray/ponde-dreamtime/	The dreamtime story of the Ngarrindjeri People of the Murray River can be explored on this site. Read the story to reveal the timeline of The Murray area, dating back 40,000 years. Discover other local Australian Indigenous stories and important information though the hyper-links provided.

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