FOCUS CONCEPTS

CURRICULUM INTENT

The Earth Charter

- Principle 1 - Understand the interconnectedness of all living things.
- Principle 14 – Actively learn for a better world

Australian Curriculum - Cross-Curriculum Priorities

- **Sustainability**
  - Sustainable patterns of living rely on the interdependence of healthy social, economic and ecological systems.
- **Aboriginal and Torres Strait Islander Histories and Cultures**
  - Aboriginal and Torres Strait Islander communities maintain a special connection to and responsibility for Country/Place throughout all of Australia.
  - Aboriginal and Torres Strait Islander Peoples have unique belief systems and are spiritually connected to the land, sea, sky and waterways.
- **Asia and Australia's Engagement with Asia**
  - Interrelationships between humans and the diverse environments in Asia shape the region and have global implications.

Australian Curriculum – General Capabilities

- Literacy
- Numeracy
- ICT Capability
- Critical and Creative Thinking
- Personal and Social Capability
- Ethical Behaviour
- Intercultural Understanding

REPERTOIRES OF PRACTICE

Australian Sustainability Curriculum Framework

	FOUNDATION LEVEL - YEAR 2	YEAR 3 -YEAR 7
WORLD VIEWING	**Beliefs, ethics and actions:** Reflecting on 'why we should do this' in regard to sustainability issues and actions in particular: • needs, wants and values of self, family, other people and cultures • needs of other species and of natural systems	**Beliefs, ethics and actions:** Reflecting upon and discussing own and others' values and ethical principles when explaining why a particular action is right or desirable in reference to sustainability
SYSTEMS THINKING	**Identify and model interdependencies:** Explain cause and effect as an event or part of a system directly causing change	**Take a big picture view:** Create a model of a system and use it to demonstrate how change to a part of the system affects the whole system
	Assessing probability, risk and benefit: Discus ways of avoiding or reducing risk in relation to sustainability issues	**Assessing probability, risk and benefit:** Propose, evaluate and enact ways to minimize risk or mitigate its consequences
	Identify intended and unintended consequences: Given a specific situation, identify a relevant action	**Identify intended and unintended consequences:** Given a challenge, use understanding of system structure to identify and explain possible actions
FUTURES AND DESIGN THINKING	**Appreciating change over time:** Identify and give reasons for change in objects, places and behaviour over the immediate past	**Appreciating change over time:** Identify continuities, trends and patterns to support forecasting of probable local futures
	Creating solutions: Generate ideas for products and environments that respond to people's needs and reflect a view of their personal future.	**Creating solutions:** Use a systems approach to identify and analyse potential future impacts of designs and actions on people and environments

SUGGESTED TEACHING AND LEARNING SEQUENCE

INQUIRY PHASE 1 – ENGAGE – MAKING A CASE FOR CHANGE

LEARNING OBJECTIVES

- Identify the relationship between indigenous peoples and the environment
- Explain how everything is interconnected

INQUIRY QUESTIONS	SUGGESTED LEARNING AND TEACHING SEQUENCE
• What is Kanyini and why is it so important? • What do we know about Aboriginal and Torres Strait Islander people and their history? • How are we connected to each other? • In what ways are we connected to our environment? • What happens to people and the environment when disaster strikes?	1. View the videoclip **'We are Caretakers'** and using examples from indigenous culture, give reasons why we need to take care of our environment 2. Make a CONCEPT WEB describing students' prior knowledge of indigenous histories and cultures 3. View the videoclip **'All is One'** and discuss how everything is interconnected. 4. Do a SURVEY to find out what students know about natural disasters and display the results on a **word wall** 5. Create a **woolly web** model to show what happens to people and the environment when a natural disaster strikes

INQUIRY PHASE 2 – EXPLORE – DEFINING THE SCOPE FOR ACTION

Learning Objectives

- Investigate the impact of sustainability issues on people and the environment
- Give reasons why action should be taken to solve environmental problems

INQUIRY QUESTIONS	SUGGESTED LEARNING AND TEACHING SEQUENCE

• Where can we find data about changes in weather and the climate?
• How is our environment changing as a result of rising temperatures?
• What do we know about the Pacific Islands of Carteret, Tuvalu and Kiribati?
• What is sea level rise?
• How is sea level rise impacting on the lives of Pacific Islanders?
• What is the current world population?
• Why are some people worried about overpopulation?
	1. Use the **BOM website** (Bureau of Meteorology) to locate data on the impact of climate change
	2. Discuss the impacts of rising temperatures, extreme weather events and increased rainfall on people and the environment.
	3. Use a map of Oceania to locate Kiribati, Tuvalu and the Carteret Islands
	4. View the videoclip **'Kiribati Rising Sea Levels'** and use a CONSEQUENCES WHEEL to identify the impacts of rising sea levels on people and their island homes
	5. View the '**Overpopulation**' videoclip and identify the environmental impacts of 7 billion people on the planet
	6. Work in EXPERT GROUPS to find out more about
	  ○ Climate change
	  ○ Sea level rise
	  ○ Population growth
	7. Use the class BLOG to make a reference list of links and information sources on the issues

INQUIRY PHASE 3 – EXPLAIN – DEVELOPING THE PROPOSAL FOR ACTION

Learning Objectives

- Identify ways that people can make a difference by taking action in response to environmental issues
- Generate ideas for actions to help raise awareness of environmental issues
- Connect with people in the community who can provide feedback and support

INQUIRY QUESTIONS	SUGGESTED LEARNING AND TEACHING SEQUENCE
• What is an ecological footprint? • How many planets do we need to survive? • How does our ecological footprint compare with St Mary's School? • What is the role of the IPCC? • What issues were discussed at the Rio+20 Earth Summit? • Why is 2012 the Year of Sustainable Energy for All? • What is the history of Earth Hour? • How could we be inspired by the 'energetic' actions taken by the students at St Joseph the Worker School? • What do people in our community already know about climate change, sea level rise, sustainable energy and ecological footprints? • Which issues should we choose as the focus for our action plan? • Who could help us to decide what we can do to make a difference? • Who can support us in our action plan?	• Visit the **WWF Ecological Footprint Calculator** to estimate the size of the class' ecological footprint • Predict the impact of increasing or decreasing different factors and test the results. How did the size of the footprint change? Give reasons why changes may have occurred. • Discuss the actions taken by Green Lane Heroes at St Mary's School to reduce their ecological footprint • Investigate the role of the **Intergovernmental Panel on Climate Change** • Visit the **Earth Summit** website and make a list of the issues discussed and the actions adopted by world leaders during the convention. • View the videoclips on the **Power the World** website and discuss the reasons why 2012 was designated as the Year of Sustainable Energy for all. • View the **Earth Hour** videoclip and conduct a SURVEY to find out how many students participated in Earth Hour in 2012. Display the results in a graph. • Discuss the actions taken by Green Lane Heroes at St Joseph the Worker School to conserve energy and identify actions that can be adopted in your school community to reduce energy consumption • Invite a representative from a local community organisation to inspire your class with possible ideas for action • Using the Green Lane Diary project plan and scrapbook, brainstorm, draw and record ideas for actions • Weigh up the pros and cons of different courses of action • Choose the most effective action • Identify the person in the school who has the authority to approve the action and prepare a detailed proposal for presentation

INQUIRY PHASE 4 – ELABORATE – IMPLEMENTING THE PROPOSAL

Learning Objectives

- Develop an action plan
- Prepare equipment and devise roles and responsibilities
- Implement the action plan

INQUIRY QUESTIONS	SUGGESTED LEARNING AND TEACHING SEQUENCE
• What equipment will we need to take action? • What steps do we need to take? • What jobs will we need to do? • Who will be responsible for each of the jobs we need to do? • What is our timeline? • How can we monitor our progress?	• Using the Green Lane Diary project plan and scrapbook, make a list of the equipment needed to fulfill the action • Identify the steps required and negotiate roles, responsibilities and timelines • Implement the action • Discuss responsibilities for each step of the action plan • Negotiate with the students to form collaborative groups who will be responsible each of the roles • Discuss the importance of gathering evidence to determine the effectiveness of the action – eg: photos, videos, data, feedback

INQUIRY PHASE 5 – EVALUATE – EVALUATING AND REFLECTING

Learning Objectives

- Collect data on the impact of the action plan
- Reflect on the results of the action plan
- Discuss strategies for improving results
- Establish a regular schedule for using the Green Lane Diary Scrapbook

INQUIRY QUESTIONS	SUGGESTED LEARNING AND TEACHING SEQUENCE
• What happened as a result of our actions? • How can we find out about the success of our actions? • Who can we tell about our successes? • What else can we do to make a difference? • Which Earth Charter values did we act upon? • Who can provide us with feedback about the success of our actions? • What evidence do we have to prove our actions were successful? • What have we learned? How can we improve our results?	• Discuss the results and impacts of the students actions with leading questions about what they observed, what they learned and how they might improve their results in future • Make links with the class version of the Earth Charter • Record results, learnings and experiences in the Green Lane Diary • Identify people in the school community who can provide feedback on the students' actions • Use **stixy** to evaluate the processes the students used to design and implement the action • Celebrate students' achievement and success • Discuss possible strategies for improving the success of the actions

TEACHING AND LEARNING RESOURCES

BOOKS

- *'Tower to the Sun'* by Colin Thompson
- *'An Inconvenient Truth'* by Al Gore
- *'We are the Weather Makers'* by Tim Flannery
- *'Thinking Globally: Global Perspectives in the Early Years Classroom'* by Julie Browett and Greg Ashman.

DIGITAL LINKS

- Global Education – Teacher resources to encourage a global perspective across the curriculum: **http://www.globaleducation.edu.au/**
- Woolly Thinking – Global Teacher, Global Learner: **http://uplace.org.uk:8080/dspace/bitstream/handle/10293/1587/Activity%206%20Woolky%20Thinking.pdf?sequence=6**
- WordSift: **http://www.wordsift.com/**
- Blogger: **www.blogger.com**
- Stixy: **http://www.stixy.com/**
- BOM - Bureau of Meteorology: **http://www.bom.gov.au/climate/change/**
- WWF Ecological Footprint Calculator: **http://www.wwf.org.au/our_work/people_and_the_environment/human_footprint/footprint_calculator/**
- IPCC – Intergovernmental Panel on Climate Change: **http://www.ipcc.ch/**
- Earth Summit 2012: **http://www.earthsummit2012.org/**
- Power the World: **http://powertheworld.org/splash-video.html**
- YouTube
    - We are Caretakers: **http://www.youtube.com/watch?v=IZmcRp6XbkA&feature=related**
    - All is One: **http://www.youtube.com/watch?v=GqJUeRltxs8**
    - Kiribati – A Call to the World: **http://www.youtube.com/watch?v=GDMpmRjCIQE&feature=related**
    - Overpopulation: **http://www.youtube.com/watch?v=mWHo_ega0RU&feature=related**
    - Earth Hour: **http://www.youtube.com/watch?v=FovYv8vf5_E&feature=youtube_gdata_player**