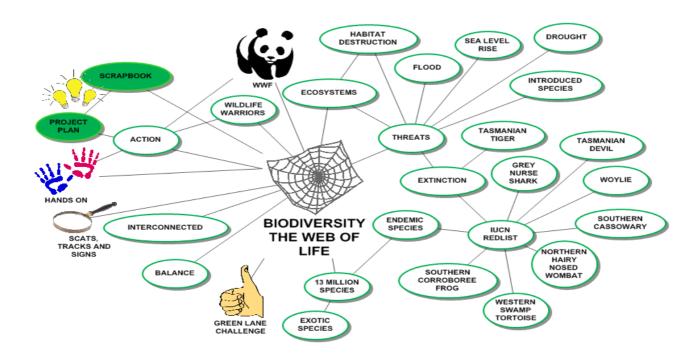




FOCUS CONCEPTS



CURRICULUM INTENT

The Earth Charter

- Principle 5: Protect the diversity of nature
- Principle 15: Prevent cruelty to animals

Australian Curriculum - Cross-Curriculum Priorities

- Sustainability
 - The biosphere is a dynamic system providing conditions that sustain life on Earth
 - Actions for a more sustainable future reflect values of care, respect and responsibility, and require us to explore and understand environments
- 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
- 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	Perceptions, feelings and values: Tuning in to and sharing own and others' perceptions of and feelings towards living things and natural environments through cultivating or otherwise caring for native and non—native plants and animals Beliefs, ethics and actions: Describing and discussing 'why I care' in regard to issues affecting biodiversity	Perceptions, feelings and values: Becoming aware of and sharing own and others' perceptions of and feelings towards living things and natural environments through working in and caring for various environments, plants and animals Beliefs, ethics and actions: Describing and discussing 'why I care' in regard to issues affecting biodiversity and empathise with others who care about		
SYSTEMS THINKING	Identifying and modeling interdependencies: Explain cause and effect as an event or part of a system directly causing a change in another part of the system Identify intended and unintended consequences: Identify short-term, intended consequences	Identifying and modeling interdependencies: Explain some interdependent elements of a systems including feedback relationships and stocks and flows 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 continuities, trends and patterns in relation to personal experiences of events and places	Appreciating change over time: Identify continuities, trends and patterns to support forecasting of probable local futures		





SUGGESTED TEACHING AND LEARNING SEQUENCE

INQUIRY PHASE 1 – ENGAGE – MAKING A CASE FOR CHANGE Learning Objectives

- Explain the concept of biodiversity
- Look for evidence of biodiversity in the local environment
- Advocate the importance of protecting the balance of biodiversity locally, nationally and globally

INQUIRY QUESTIONS

What is biodiversity?

- Why is biodiversity important?
- How do we know when the web of life is out of balance?
- What is the difference between endemic and exotic species?
- What are scats, tracks and signs?
- How can we use scats, tracks and signs to make conclusions about the biodiversity that lives in our backyard?

- 1. View the videoclips <u>Biodiversity</u> to find out more about biodiversity. Draw examples from the videoclip and from the local environment.
- 2. View the videoclip from David Suzuki 'Why Biodiversity matters' and summarise the reasons for protecting biodiversity
- 3. Discuss the concept of interconnectedness and balance and consider the impact of the loss of biodiversity on the web of life. Make predictions about what might happen to the environment as biodiversity decreases. View the IUCN videoclip 'What kind of world do we want?' and find evidence of what might be causing the web of life to be 'off balance'.
- 4. Research the difference between endemic and exotic species to construct a clear definition of the terms. Predict what might happen to endemic species when the biodiversity in its habitat is threatened.
- 5. Prepare for a SCAVENGER HUNT in the local environment. Give examples of scats (animal poo), tracks (animal footprints, paw prints, claw prints or body prints) and signs (nests, holes through leaves) and emphasise the importance of observing the natural environment without disturbing it. Record evidence of scats, tracks and signs and display the information in a graph. Make connections between the evidence and what animals could be living in your school environment/local area.





INQUIRY PHASE 2 – EXPLORE – DEFINING THE SCOPE FOR ACTION Learning Objectives

- Investigate threats to biodiversity
- Explain the criteria used to determine the status of species on the IUCN Redlist
- Identify the features of Australian animals on the IUCN Redlist of Endangered Species
- Investigate the history of the Tasmanian thylacine
- Consider what actions could have been taken to prevent the extinction of the thylacine

INQUIRY QUESTIONS

• What are some of the threats to biodiversity?

- What is the impact of these threats on ecosystems?
- What is the impact of these threats on animals?
- What is the impact of these threats on plants?
- How are people being affected by threats to biodiversity?
- What is the IUCN Redlist?
- What are the 7 categories used to 'register' species for the IUCN Redlist?
- What are the special features of the Green Lane Diary characters?
- What does extinction mean?
- Which Australian animals are now extinct?
- Why did the Tasmanian tiger disappear?
- What would you do if you were living in the 1930s when the last thylacine was still alive?

- 1. View the <u>'Official video of the Year of Biodiversity'</u> and make a WALL identifying threats to biodiversity.
- 2. Use the resources on the Green Lane Diary website to find out more information about threats to biodiversity
- 3. Work in EXPERT GROUPS to investigate the LOCAL AND GLOBAL impact of threats to biodiversity on:
 - a. Ecosystems
 - b. Animals
 - c. Plants
 - d. People
- 4. Share the results of the research on the class BLOG
- 5. Explore the <u>IUCN Redlist</u> to find out how it works and how species are sorted into 7 different categories depending on the level of threat. Make FLASHCARDS to define each of the 7 categories. Do a BUNDLING ACTIVITY to sort the Green Lane Diary Characters into the correct IUCN Redlist category:
 - a. Woylie
 - b. Grey Nurse Shark
 - c. Tasmanian Devil
 - d. Western Swamp Tortoise
 - e. Southern Corroboree Frog
 - f. Northern Hairy-Nosed
 - g. Southern Cassowary
- 6. Work in EXPERT GROUPS to create a PUBLIC PROFILE for each of the Green Lane Diary Characters describing their features, habitat, food and threats to survival. Upload your research to the Green Lane Diary website.
- 7. BRAINSTORM ideas about animals that are now extinct and draw and label descriptions of these animals for a class display.
- 8. Research the events leading to the extinction of the Tasmanian thylacine using a variety of primary and secondary source materials from the Thylacine Museum and the Tasmanian Parks and Wildlife Services
- 9. Discuss what action could have been taken to prevent the extinction of the last Tasmanian tiger.





INQUIRY PHASE 3 – EXPLAIN – DEVELOPING THE PROPOSAL FOR ACTION Learning Objectives

- Investigate actions undertaken by individuals and groups to protect biodiversity
- Generate ideas for actions to preserve biodiversity in the local community and globally
- Connect with people in the community who can provide feedback and support

INQUIRY QUESTIONS

What are individuals and groups such as Choose Cruelty Free, WWF and Wildlife Warriors doing to protect biodiversity?

- What tools are used to communicate the key messages of the campaigns?
- What actions can be taken by individuals as part of these campaigns?
- Which issues should we choose as the focus for our action plan?
- How can we make sure that we are thinking globally and acting locally?
- What ideas can we use from nature to help inspire our designs?
- Who can support us in our action plan?

- 1. Find out what individuals and groups are doing to protect biodiversity locally and globally. Work in EXPERT GROUPS to identify strategies and to gather information about the actions and campaigns being undertaken by:
 - a. Choose Cruelty Free
 - b. World Wildlife Fund
 - c. Wildlife Warriors
- Record the results of your investigations on the class BLOG and share your ideas for action with other schools on the Green Lane Diary website
- 3. Invite a representative from a local community organisation to inspire your class with possible ideas for action
- 4. Using the Green Lane Diary project plan and scrapbook, brainstorm, draw and record ideas for actions
- 5. Weigh up the pros and cons of different courses of action
- 6. Choose the most effective action
- 7. 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

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- 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?

SUGGESTED LEARNING AND TEACHING SEQUENCE

- 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

INQUIRY QUESTIONS

- 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 <u>STIXY</u> 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

- 'I Saw Nothing The Story of the Last Tasmanian Tiger' by Gary Crew
 - o Teaching notes: http://www.curriculumpress.edu.au/rel/sustainability/i-saw-nothing.php
- *'The Great Kapok Tree'* by Lynne Cherry

DIGITAL LINKS

- Tasmanian Parks and Wildlife Services: http://www.parks.tas.gov.au/index.aspx?base=4765
- The Thylacine Museum: http://www.naturalworlds.org/thylacine/
- IUCN Redlist: http://www.iucnredlist.org/
- YouTube
 - Year of Biodiversity: http://www.youtube.com/watch?v=V1VYmpTikgw
 - IUCN Redlist: What kind of world do we want?:
 http://www.youtube.com/watch?v=yo51Re1JO4U&feature=related
 - David Suzuki Why biodiversity is important:
 http://www.youtube.com/watch?v=N5ssjM2Fjuc&NR=1&feature=endscreen
 - Biodiversity:
 http://www.youtube.com/watch?v=iThpkXWVeqE&NR=1&feature=fvwrel
- Bubbl: https://bubbl.us/
- Design Thinking for Educators: http://designthinkingforeducators.com/
- Wallwisher: http://wallwisher.com/
- WordSift: http://www.wordsift.com/
- Global Education Teacher resources to encourage a global perspective across the curriculum: http://www.globaleducation.edu.au/