Year 1 Living World Unit - Planning	
Outcomes & Content (Syllabus Page 53)	
Working Scientifically ST1-1WS-S	➔ observes, questions and collects data to communicate and compare ideas ◆ Planning and conducting investigations ◆ Processing and analysing data
Design & Production ST1-2DP-T	➔ uses materials, tools and equipment to develop solutions for a need or opportunity ◆ Researching and planning ◆ Producing and implementing
Living World (Science) ST1-4LW-S	➔ describes observable features of living things and their environments ◆ describe the external features of a variety of living things ◆ identify and group plants and animals using their external features, for example: • native and introduced plants and animals • worms, insects, fish, reptiles, birds and mammals ◆ identify that living things live in different places that suit their needs ◆ design and produce an environment to cater for the needs of a living thing, for example: • encourage the growth of a plant, eg greenhouses, hydroponics • encourage the return of a living thing to a local habitat ◆ recognise that people use science and technology in their daily lives, including when caring for their environment and living things
Integrated Outcomes & Content	
Geography Features of Places GE1-1 **GE1-2** **GE-13**	This scientific unit links with the Geography: Features of Places, in particular investigating the features of places and how they can be cared for. ➔ describes features of places and the connections people have with places ➔ identifies ways in which people interact with and care for places ➔ communicates geographical information and uses geographical tools for inquiry
Mathematics MA1-16MG	**Position:** ➔ represents and describes the positions of objects in everyday situations and on maps
English EN1-4A	**Reading and Viewing:** ➔ draws on an increasing range of skills and strategies to fluently read,

	view and comprehend a range of texts on less familiar topics in different media and technologies
Visual Arts **VAS1.1** **VAS1.2**	**Making:** ➔ Makes artworks in a particular way about experiences of real and imaginary things ➔ Uses the forms to make artworks according to varying requirements

Inquiry Questions (Syllabus)

Scientific Inquiry Questions	**Geographic Inquiry Questions**
• What are the external features of living things? • How can we improve a local environment to encourage living things to thrive?	• What are the features of, and activities in, places? • How can we care for places?

Thinking Skills (page 35)

Scientific Thinking, Systems Thinking, Design Thinking

Cross Curriculum Priorities & General Capabilities (page 38)

Critical and creative thinking, Literacy, Civics and citizenship, Intercultural understanding, Sustainability, Ethical understanding

Possible Learning Experiences

<u>What are the external features of living things?</u>

- Pose the question: ***What is the difference between a living and non-living thing?***
    - Display a series of images. Students sort and classify the images according to whether it is living or non-living?
        - Discuss:
            - Were any of them once living?
            - How can you tell if something is living?
            - Which ones are animals, plants or neither?
        - Explore the language we use to talk about living and non-living things. Record these around categories:
            - What words would you use to describe something that is living?
            - What words would you use to describe something that has never been living?
            - Some things in these pictures were once alive. What words would you use to describe them?
            - Why is it important to know if something is living or non-living?
        - Identify similarities amongst living things → helping to build student understanding that "*All living things can move, grow, respire, sense and respond to their environment and reproduce. They also need nutrients and excrete their waste.*"
            - Is there anything that all living things have in common?
- **<u>Sensory Investigation</u>**
    - Equipment: iPads, Science books, pencil
    - Take students on a sensory walk around the school grounds.

        - Observe living and non-living features such as plants, animals, gardens, mulched areas, built, natural and playground areas. Use the iPad to capture photographs of their observations of playground plants and animals.
            - Identify some of the external features they notice when observing the plants and animals in the school environment. For example, leaves, stems, seeds, flowers, legs, eyes, wings, feathers etc.
            - **LINKS-Visual Arts/Technology**: use an app like Pic Collage to create a photographic collage of the images taken. Students could also experiment with different photographic editing techniques, such as Black and White, cropping, changing colours or creating multiple versions of the same image (Andy Warhol inspired).
        - Identify what is living (e.g. plant), non-living (e.g. rock) and was once living (e.g. dead leaf).
        - Students collect some once-living objects from the ground, e.g. leaves, sticks and seeds to display in the classroom.
            - **LINK-Visual Arts**: Leaf rubbing to examine the features of different leaves
        - Students draw and label an example of a plant and animal they observed in the school environment. They are encouraged to identify and label the external features they notice. Write a sentence stating their observations, e.g. 'The bird has a long, black beak with white feathers and long legs.' **Alternatively, students could digitally label a photograph.**
    - **LINK-Mathematics**: Using a map of the school, annotate it with the location of living things observed in the school environment. Use a key to plot planted areas, animals in the playground and the route taken on the sensory walk. (**MA1-16MG**)
- Examine a range of other living plants and animals that can be found in different environments on the Central Coast.
    - Identify and categorise the plants and animals based on their external features. For example:
        - Animals that are reptiles, mammals, fish, insects, worms etc.
            - Clip: What's in the rock pools http://abcspla.sh/m/2519543 might help to build further aquatic animal categories.
        - Plants that are trees, plants that flower, plants that are deciduous, are weeds etc.

How can we improve a local environment to encourage living things to thrive?

- Pose the question '***What is a habitat?***'
    - Examine the Crash Course Kids clip: Home Sweet Habitat https://youtu.be/p15IrEuhYmo and stop the clip at 0:42 seconds
    - Discuss and develop a shared definition of a habitat
- Generate a list of different habitats that we might find on the Central Coast, identify the similarities and differences between them, and explore some animals that might live in these habitats.
    - For example, wetlands, coastal dunes, rock pools, forest, urban areas, lakes
    - **LINK-Literacy**: Use a range of literature to support the exploration of these environments:
        - Why I Love Australia by Bronwyn Bancroft —> (Bancroft uses both words and images to explore the awe-inspiring beauty of the Australian continent. The book explores different Australian environments and landscapes, ranging from the sea to the mountains and the city to the bush. The book is

illustrated with beautiful paintings.)
        - Tuart Dwellers by Jane Ramage —> (Over the day as the caterpillar metamorphoses into a moth we are introduced to the animals of the Tuart woodlands and the ecosystem that supports them. This story will help children understand that insects, birds and animals make their home in trees and are codependent.)
    - Possible walking excursion: Take students on a walking excursion to examine one of the nearby habitat environments, such as Wyrrabalong Coastal Walk in the Wyrrabalong National Park, rock pools on Bateau Bay Beach (34min walk) or wetland estuary at Saltwater Creek (10min walk).
- Examine the interactive ABC Education resource: *Skin and Scales, Feathers and Fur* http://education.abc.net.au/home#!/digibook/1273965/skin-and-scales-feathers-and-fur
    - Examine some of the animals and identify the external features that help them survive and the habitats they live in.
    - Watch Chapter 12: Minibeasts in your world and discuss how they created a habitat to encourage living things to live there.
    - Discuss what would happen if habitats changed.
        - What would happen if all the trees were cut down in a forest?
        - What would the animals do?
    - Watch 'I Got A Habitat' video. https://www.youtube.com/watch?v=H_CSlLIuVZs
- Design and Produce Task: design and produce an environment to cater for the needs of a living thing (this could be done in pairs) - possible assessment opportunity
    - Explore ways to make a new space for plants or animals using recycled materials, e.g. a bird house, or mini greenhouse for plants
    - Examine different materials and suggest which ones would be most suitable for outdoors.
    - Design and label their new environment and identify a suitable location to put it.
    - Use a range of materials to create the new environment
    - Discussion prompts:
        - What properties of your materials made them useful for the new environment?
        - Were some materials more suited than others? Why?
        - Can you think of other materials (other than those provided) that may be suitable for the new environment?
        - Was the new environment successful?
        - What would you change to make it better?
        - How do you think different designs and materials impact the type of environment you could create?
    -

Useful Resources:

- Museums Victoria https://museumsvictoria.com.au/learning/learning-lab/little-science/
- Australian Government Resource: The Environment and Nature https://australiascience.tv/app/uploads/2017/04/LibraryPack_NatureandEnvironment.pdf