

Lessons in the Gardens – Brisbane Botanic Gardens Mt Coot-tha



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Overview

The Brisbane Botanic Gardens Mt Coot-tha offers a wide range of hands-on outdoor learning opportunities for early childhood, primary and senior school groups. Our lessons are aligned with both the Queensland Kindergarten Learning Guidelines and Australian Curriculum, and have been designed to suit specific early childhood, prep, primary and secondary levels. Help your students see science theory in action, explore geographical concepts, immerse themselves in botanical art and develop sustainable approaches to living with our trained and knowledgeable education staff.

We are currently in the process of re-writing the lessons to suit the v9.0 Australian Curriculum and are adding these as they are completed. Teachers are encouraged to contact the Education and Interpretation Coordinator on BotGardensEd@brisbane.qld.gov.au for more information.

Please note: you can use 'Ctrl f' (for PCs) or 'Command f' (for Macs) to search this document for specific words.



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Biological sciences (Years Prep – 6)

Take your students out of the classroom and into the real world in our unique, botanical laboratory. Put science concepts into practice as your students investigate plant adaptations first-hand, dig in the leaf litter for invertebrates, or gather biotic and abiotic data to explore the environmental relationships between a habitat and the organisms that live within it.

Lesson Details	Overview
Prep Our senses and the living world Delivery location: Brisbane Botanic Gardens Mt Coot-tha Duration: 1.5 hours	Students use their senses to explore and observe the world of living things (plants and animals) in the botanic gardens. Through hands-on activities, they investigate the needs of these living things and come to understand how their needs are met. Curriculum links: ACARA v8.4 Biological sciences • Living things have basic needs, including food and water (ACSSU002)
Prep Plant part-y Delivery location: Brisbane Botanic Gardens Mt Coot-tha Duration: 1.5 hours	Wanted! Budding botanists for a plant part-y adventure! Listen to the wise, old tree sharing its life story, growing from seed to full grown tree. Play scientist as you explore real plant parts using magnifiers, viewing frames, pictures, posters, pencils and paper. Use your experiences to create a model tree. Curriculum links: ACARA v9.0 Biological Science • Students learn to observe external features of plants and animals and describe ways they can be grouped based on these features (AC9SFU01) Planning and Conducting • Students learn to engage in investigations safely and make observations using their senses (AC9SFI02)



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Lesson Details	Overview
	Processing, modelling and analysing - Students learn to represent observations in provided templates and identify patterns with guidance (AC9SFI03) Communicating - Students learn to share questions, predictions, observations and ideas with others (AC9SFI05)
Year 1 Living things and their habitats Delivery location: Brisbane Botanic Gardens Mt Coot-tha Duration: 1.5 hours	Students explore a variety of habitats within the botanic gardens. Through exploration and observation, links are made between the needs and external features of living things and their habitats. Students consider what makes a healthy habitat and the possible effects of habitat change. Curriculum links: ACARA v8.4 Biological sciences - Living things have a variety of external features (ACSSU017) - Living things live in different places where their needs are met (ACSSU211)
Year 3 What's living in the gardens? Delivery location: Brisbane Botanic Gardens Mt Coot-tha or City Botanic Gardens Duration: 1.5 hours	Using a hands-on approach, students investigate and observe both living (plants and animals) and non-living things in various botanic gardens' habitats. Observation and investigation opportunities are available for students to collect data and then identify and group things according to characteristics of living, non-living or once-living. Curriculum links: ACARA v8.4 Biological sciences Living things can be grouped based on observable features and can be distinguished from non-living things (ACSSU044)



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Year 3 Life cycles in the gardens Delivery location: Brisbane Botanic Gardens Mt Coot-tha Duration: 1.5 hours	Humming with plants, animals, and hidden wonders, the botanic gardens is the perfect environment for curious young scientists. Students explore several plant collections, learning how life cycles work and collecting clues and information to build a plant life cycle. Curriculum links: ACARA v9.0 Biological sciences • Students learn to compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals (AC9S3U01) Processing, modelling and analysing • Students learn to construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information, show simple relationships and identify patterns (AC9S3I04)
Year 4 Habitat relationships Delivery location: Brisbane Botanic Gardens Mt Coot-tha Duration: 1.5 hours	Students investigate several plant and animal interactions and relationships present in habitats found in the botanic gardens. The roles (producers, consumers, decomposers) of living things are examined, as well as the positive and negative impacts of humans on living things. Curriculum links: ACARA v8.4 Biological sciences • Living things have life cycles (ACSSU072) • Living things depend on each other and the environment to survive (ACSSU073)



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Year 4 Exploring food chains – the Ecosystem Café Delivery location: Brisbane Botanic Gardens Mt Coot-tha Duration: 1.5 hours	Welcome to the Ecosystem Café, where the lagoon serves the freshest food chains around! In this explorative, hands-on lesson, students are invited to uncover how food chains work, by meeting the lagoon’s producers, consumers, and decomposers. They discover how each organism earns its place on the 'menu' and keeps the lagoon ecosystem running smoothly. Curriculum links: ACARA v9.0 Biological sciences - Students learn to explain the roles and interactions of consumers, producers and decomposers within a habitat and how food chains represent feeding relationships (AC9S4U01) Questioning and predicting - Students learn to pose questions to explore observed patterns and relationships and make predictions based on observations (AC9S4I01) Planning and conducting Students learn to use provided scaffolds to plan and conduct investigations to answer questions or test predictions, including identifying the elements of fair tests, and considering the safe use of materials and equipment (AC9S4I02) Students learn to follow procedures to make and record observations, including making formal measurements using familiar scaled instruments and using digital tools as appropriate (AC9S4I03)



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Year 5 Adaptations in the gardens Delivery location: Brisbane Botanic Gardens Mt Coot-tha Duration: 1.5 hours	Using various plant and animal habitats found within the botanic gardens, students develop an understanding of the functions of plant and animal adaptations. Students investigate how the features of these habitats influenced the development of these adaptations. Curriculum links: ACARA v8.4 Biological sciences Living things have structural features and adaptations that help them to survive in their environment (ACSSU043)
Year 5 Plant adaptations – adapt, survive, thrive! Delivery location: Brisbane Botanic Gardens Mt Coot-tha Duration: 1.5 hours	Spines and waxy skin... drip tips, hooks and tendrils? How do these adaptive structures help plants survive and thrive? Use our habitat research stations to uncover the secrets of plant success, and be amazed at the survival power of plants. Curriculum links: ACARA v9.0 Biological Sciences - Students learn to examine how particular structural features and behaviours of living things enable their survival in specific habitats (AC9S5U01) Planning and conducting - Students learn to use equipment to observe, measure and record data with reasonable precision, using digital tools as appropriate. (AC9S5I03) Processing, modelling and analysing Students learn to construct and use appropriate representations, including tables, graphs and visual or physical models, to organise and process data and information and describe patterns, trends and relationships (AC9S5I04)



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Lesson Details	Overview
Year 6 Investigating the gardens Delivery location: Brisbane Botanic Gardens Mt Coot-tha Duration: 1.5 hours	Students participate in a field study using a botanic gardens' habitat. They identify the features of and investigate and collect data for that habitat, and then relate this information to the types of living things found there. Students are encouraged to use the data collected to create a habitat profile. Curriculum links: ACARA v8.4 Biological sciences • The growth and survival of living things are affected by the physical conditions of their environment (ACSSU094) ACARA v9.0 lesson currently in development.