Life Detectives
Year 3 Day Visit Program

This immersive, curriculum-aligned program invites Year 3 students to become Life Detectives on a mission from the Biologist Bureau of Discovery (BBD). Guided by a fun and engaging narrative featuring the fictional scientist "Dr Nova," students explore and compare the characteristics of living and non-living things and examine the life cycles of animals and plants.
Throughout the day, students rotate through four engaging missions across marine and terrestrial settings. These include:
Plankton Discovery Lab – observing microscopic life and discussing what makes something living
Clownfish Reef Lab – investigating fish behaviour and breeding in a live reef aquarium
Mini-Beast Safari – collecting insects and identifying their life stages
Plant Life Lab – exploring seeds and seedlings using microscopes and planting activities.
Each hands-on investigation focuses on a different living thing, encouraging close observation, reflection, and teamwork. Using tools such as microscopes, nets, and live aquariums, students collect evidence, complete challenges, and report their findings to Dr Nova's field agents.
Working in teams, students reflect on what they've learned in a Life Detective Passport and earn badges at each stage. Their goal: collect all four life cycle badges and become Certified Life Detectives by day's end!

Curriculum Links

Science Understanding – Biological Sciences

- AC9S3U01: Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals.

Science as a Human Endeavour

- AC9S3H01: consider how people use scientific explanations to meet a need or to solve a problem

Science Inquiry Skills

·AC9S3I01: pose questions to explore observed patterns and relationships and make predictions based on observations
·AC9S3I02: 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
·AC9S3I03: use provided tables and visual or physical models to represent data and identify patterns
·AC9S3I04: 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
·AC9S3I05: compare findings with those of others, consider if investigations were fair, identify questions for further investigation and draw conclusions
·AC9S3I06: communicate ideas, findings and solutions to problems using technical and everyday language

General Capabilities

Science Understanding – Biological Sciences

AC9S3U01 – Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals

- Investigate and describe features that distinguish living from non-living things
- Explore and compare life cycles of different plants and animals through observations and activities
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Science as a Human Endeavour

AC9S3H01 – Consider how people use scientific explanations to meet a need or to solve a problem

- Discuss how scientists use knowledge of living things to solve real-world problems
- Reflect on how understanding life cycles helps people make decisions about the environment and conservation

Science Inquiry Skills

AC9S3I01 – Pose questions to explore observed patterns and relationships and make predictions based on observations

- Encourage students to ask questions about living things and their life cycles
- Make predictions based on what they observe during investigations

AC9S3I02 – 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

- Guide students to plan simple investigations using step-by-step support
- Teach students about safety and fairness in conducting experiments

AC9S3I03 – Use provided tables and visual or physical models to represent data and identify patterns

- Help students organise their observations using tables or models
- Support them to spot patterns in their data

AC9S3I04 – 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

- Students create graphs or charts to display their findings
- Use models to explain relationships between living things and their environment

AC9S3I05 – Compare findings with those of others, consider if investigations were fair, identify questions for further investigation and draw conclusions

- Facilitate discussions comparing results within groups or classes
- Encourage reflection on investigation fairness and ideas for new questions

AC9S3I06 – Communicate ideas, findings and solutions to problems using technical and everyday language

- Guide students to share their discoveries using clear language
- Use both scientific terms and everyday words to explain concepts

Learning Intentions

WHAT... are we learning?

Students, in the role of Habitat Heroes, participate in scientific activities to:

·identify the basic needs of plants and animals, including air, water, food or shelter

·describe how the places their habitats meet their needs

WHY ... should we be a Habitat Hero?

·Habitat Heroes are scientists who help people care for environments and living things.

·Science knowledge is used to recommend changes.

HOW ... will you know you're successful?

·Explore and find living things in a variety of habitats

·Discuss the basic needs of living things to survive in their habitat

·Identify features of a healthy and unhealthy environment

·Recognise how First Nations Australians care for living things

CARA's

·Walking on uneven surfaces

·Science activities

·Animal Observation

BIEEC PEDAGOGY

Our student-centred learning approach focuses on hands-on, interactive activities that engage students and encourage exploration. By allowing students to take ownership of their learning and set personal goals, they develop independence and critical thinking skills. Teachers act as mentors, supporting students by asking questions throughout their learning journey to assist with building a lifelong love of learning.

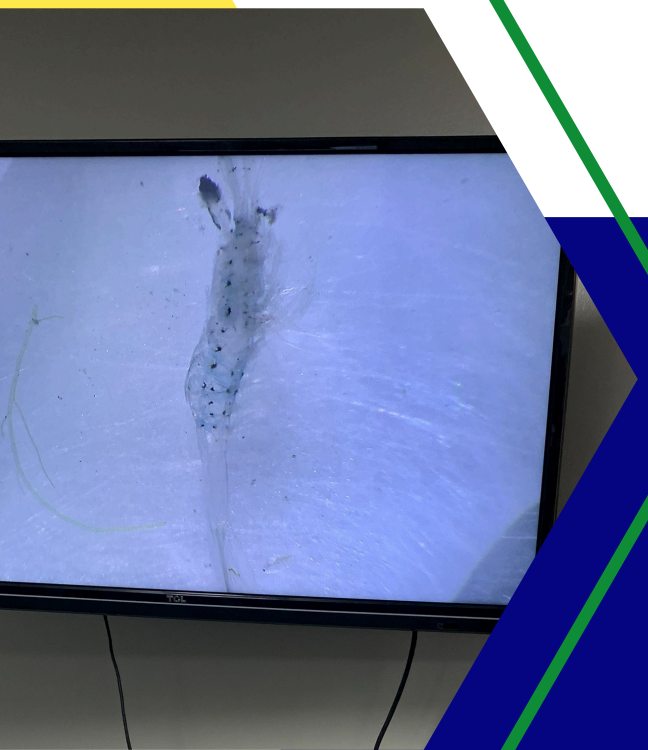
SAMPLE ITINERARY

Please Note: This is a SAMPLE itinerary and your Program Manager will forward your individual program shortly.

EMPOWERING EXTRORDINARY MINDS

TIME	ACTIVITIES
Welcome	Welcome & Induction Australian Curriculum focus: WHAT WHY HOW Call to action – students are provided with their mission for the day's activities.
Morning Session	Mission 1: Plankton Discovery Lab – observe living plankton under microscopes
	Mission 2: Clownfish Reef Lab – explore fish behaviour and life cycles using live reef tanks
Lunch	Lunch(+)
Afternoon Session	Mission 3: Mini-Beast Safari – collect and study bugs, identify life stages
	Mission 4: Plant Life Lab – observe seeds, seedlings, and plant parts using tools and microscopes
	Toilet break (+)
	Revisit Australian Curriculum focus: WHAT WHY HOW BIEEC feedback
Farewell	Students depart (+)

*Denotes – activity taken by BIEEC staff with visiting school staff support
# Denotes – activity taken by visiting school staff with BIEEC staff support
+ Denotes – activity taken by visiting school staff



Students and adults will need:

- Closed in shoes
- Another pair of closed in wet shoes (for low tide activity)
- Sun-safe clothing and hat
- Sunscreen and insect repellent already applied
- Water bottle
- Morning tea and lunch (litter-free)

Litter-free Lunch: We encourage students and staff to pack a litter-free lunch. Everything in it can be re-used, composted or recycled. Drinks are brought in refillable bottles.