

WHAT'S IN THE BOX?

LEVEL

Level 3 – Level 4

ACTIVITY DESCRIPTION

Students learn about biodiversity by creating their own curiosity box. They explore the school grounds and collect evidence or take images that represent the biodiversity of their school. As an alternative, students could walk to a local park or wetland. Students discover the importance of maintaining biodiversity and steps that can be taken to protect biodiversity in their area.

THEME

- Biodiversity

MATERIALS REQUIRED

- Variety of boxes, one for each student.
- Pencils, Textas
- Variety of paint colours
- Pens
- Paint Brushes
- Access to school ground or local park

INSTRUCTIONS

Begin discussion by asking students what they know about biodiversity? What does biodiversity mean? What is the difference between genetic diversity, species diversity and ecosystem diversity? How can we demonstrate that we have biodiversity at school? Show students a feather that you found in the school ground. Discuss which bird the feather would have come from? Is it a Magpie or a Kookaburra feather? How can we find out?

Introduce the concept of a curiosity box. The box will be used to collect evidence of biodiversity in the school ground. Once items are collected students write a paragraph about each item. The curiosity box can also be decorated resembling the biodiversity of the school.

Once each student has completed their task, students present two items from the curiosity box to the whole class. As more evidence of biodiversity is discovered and presented, students build their knowledge. Discuss what improvements could be made in the school yard to increase biodiversity. Discuss how students can maintain biodiversity at their school and the steps they can take to protect what already exists.

Students display their curiosity boxes around the classroom to share findings and promote discussion.

EXAMPLE: <https://littlepinelearners.com/cardboard-nature-display/>

✓ SUGGESTIONS FOR ASSESSMENT

Presentation of two items of evidence from their curiosity box. A completed curiosity box that is creative and represents the biodiversity of the school.

📍 CURRICULUM LINKS

DESIGN AND TECHNOLOGIES

Types of natural vegetation and the significance of vegetation to the environment, the importance of environments to animals and people, and different views on how they can be protected; the use and management of natural resources and waste, and different views on how to do this sustainably (VCGGK082)

Similarities and differences in individuals' and groups' feelings and perceptions about places, and how they influence views about the protection of these places (VCGGK083)

🔍 BACKGROUND INFORMATION

BIODIVERSITY

Biodiversity comes from two words, Bio meaning life and diversity meaning variability.

Biodiversity is the variety of all living things; the different plants, animals and micro- organisms, the genetic information they contain and the ecosystems they form.

GENETIC DIVERSITY

Genetic diversity is the variety of genes within a species. Each species is made up of individuals that have their own particular genetic composition. This means a species may have different populations, each having different genetic compositions. To conserve genetic diversity, different populations of a species must be conserved.

Genes are the basic units of all life on Earth. They are responsible for both the similarities and the differences between organisms.

SPECIES DIVERSITY

Species diversity is the variety of species within a habitat or a region. Some habitats, such as rainforests and coral reefs, have many species. Others, such as salt flats or a polluted stream, have fewer.

In Australia, more than 80% of plant and animal species are endemic, which means that they only occur naturally in Australia.

ECOSYSTEM DIVERSITY

Ecosystem diversity is the variety of ecosystems in a given place. An ecosystem is a community of organisms and their physical environment interacting together. An ecosystem can cover a large area, such as a whole forest, or a small area, such as a pond.

An ecosystem is a community of organisms and their physical environment interacting together. An ecosystem may be as large as the Great Barrier Reef or as small as the back of a spider crab's shell.