

Nature Passport

Lesson Idea: Nature Safari

Activity Summary

Do you know who lives at your school? The Safari function of the Nature Passport App assists students to record sightings and observations in the school grounds. Record sightings from informal spontaneous discoveries like an interesting creature spotted at lunch time, class field journal investigations, wilderness excursions or even a whole school BioBlitz event. This lesson introduces the Safari function and assists classes to develop a research focus for future **Science** investigations.

Learning Outcomes

At the end of this lesson, students will be able to:

- Survey animal or plants in the school grounds using the Nature Passport App
- Observe animal or plant behaviour and write observations in note form
- Collate survey data and make presumptions from the results
- Brainstorm different approaches to researching and identifying local species

Introduce the Activity

1. Set a timer for one minute and ask students to quickly write a list of animals they have seen on the school grounds.
2. Compare lists and ask how many students could have kept listing more animals if they were given more time.
3. Set the timer for one minute again and repeat the exercise - this time have students write a list of plants they have seen on the school grounds.
4. Using a SMART board or projector connected to a device, introduce the Safari function, including taking photos and writing observations. Note that the date and time is important so that journal entries can be compared in later lessons. You may also like to instruct students to record where the species was located.

Please note that the field guide function, iNaturalist, sends queries to scientists or citizen science organisations and is only available for vertebrate animals. Due to the large quantity of data anticipated to be received, answers may take some time to be returned. We suggest that you use a field guide app, online resource or books to identify species first. Ask students not to use the field guide or iNaturalist without first asking for teacher permission.

5. Divide the class into small groups with one category per group: birds, reptiles, invertebrates, mammals (depending on area), trees, shrubs, groundcover, fungus.
6. Give each group a device with the Nature Passport App loaded. Introduce the challenge of surveying and recording as many different species as they are able, in their designated category, during the allotted time (ie. half an hour). Remind students they are to make one entry for each different animal or plant they find. Instruct students to write the common name of the species if they know it or make up a name if they don't.

7. Send groups outside in a designated area to search for species, take photos and write notes.
8. Call the groups back into class at the end of allotted time.
9. Ask students to count the number of different species their group found and note these on a whiteboard. You may choose to have students display this in column graph form.
10. Connect a device to a SMART board or projector and share a couple of journal entries from each group with the class.

Lesson Reflection

1. Ask students how they went about finding species in the school grounds to survey.
2. Discuss which category had the most and least species and why that may be so.
3. Ask for suggestions and discuss different ways to research and identify unknown species.
4. Discuss as a class which category would be the most important to do further study and why.

Extension Ideas

- Use field guides in book, app and web form to identify species found and edit journal entries.
- Investigate nomenclature, the scientific naming of species, and how scientists use this convention to name animals and plants.
- Use a microscope attachment on the camera lens of the devices to conduct a survey of invertebrates in different classifications.
- Research indigenous names of the animals and plants and add them to the journal entries. Include the significance of these species to the First Peoples of the area.
- Organise or join a citizen science BioBlitz event (see www.opalexplornature.org/BioBlitzes or discoverycircle.org.au/projects/bioblitzes).