

Biodiversity is Amazing

Discovery Hunts on your site

Essential Question(s):

What characteristics of plants and animals make them different or diverse?

At A Glance: Learners participate in a Biodiversity Hunt searching for different indicators of biodiversity on their school site.

Background Information:

Biodiversity can be described as the wide range of different types of organisms in a given place at a given time.

Biodiversity has been linked to stability in ecosystems.

Biodiversity is important in an ecosystem because it allows for a wider range of genetic information. Learners can begin thinking about biodiversity simply by looking for different characteristics that are present in natural areas.

Getting Ready:

Choose a worksheet for learners to complete from four options. For option two, predetermination of groups of learners may be required.

Procedure:

1. Review or introduce the concept of biodiversity to the learners by asking them to define diversity. Add the prefix 'bio' to this word and explain that biodiversity is a word that describes the differences between living things in an area. It is often used as a measurement. The rainforest ecosystem, for instance, has a lot of biodiversity. There are a lot of different living organisms in this one area.
2. Choose one of the worksheet options that you would like to complete with your learners. Explain to learners what they will be doing to complete the worksheet. As learners search and find interesting organisms, they should be thinking about why diversity is important in general and also in the ecosystem.
3. Allow 15 to 30 minutes for students to find the things listed on the worksheet. (For worksheet option two, tasks may be divided between groups of learners.) Learners should follow the directions at the top of their worksheets.

Discussion/Assessment:

After the learners have returned from the hunt ask them if they found or completed everything on the list. Make sure that they know that it is fine if they did not find everything. With older children, the teacher should ask why they think that diversity is important. This can lead into an open-ended discussion.

Location: outside at school site or in the forest

Objectives: *Learners will*

- 1) search for plants and animals that have different characteristics.
- 2) find that the school site or forest is full of different types of plants and animals.

Skills: communication, observation, listening

Supplies:

- cardboard clipboards
- pencils
- Biodiversity Hunt Worksheet (option 1, 2, 3 or 4)

Subjects: science

Time: 20 – 40 minutes

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Discovery Hunt *Version 1*

INSTRUCTIONS: A place with high **biodiversity** has many plant and animal species. There are many different plants and animals on our site and each has different characteristics. All these different plants and animals make up our site's biodiversity department. Take a walk and try to locate items with the following characteristics. Each item must be a part of the natural environment such as a plant, animal, soil or water. Does our site have a lot of different plant and animals? How many can you find? Place a check in front of each thing that you find.



Find something:

- | | |
|--|--|
| <input type="checkbox"/> 1. yellow | <input type="checkbox"/> 16. smooth |
| <input type="checkbox"/> 2. round | <input type="checkbox"/> 17. tiny |
| <input type="checkbox"/> 3. that smells good | <input type="checkbox"/> 18. huge |
| <input type="checkbox"/> 4. that smells bad | <input type="checkbox"/> 19. fuzzy |
| <input type="checkbox"/> 5. pointy | <input type="checkbox"/> 20. brown |
| <input type="checkbox"/> 6. rough | <input type="checkbox"/> 21. black |
| <input type="checkbox"/> 7. cold | <input type="checkbox"/> 22. noisy |
| <input type="checkbox"/> 8. tall | <input type="checkbox"/> 23. rectangular |
| <input type="checkbox"/> 9. round | <input type="checkbox"/> 24. with 6 legs |
| <input type="checkbox"/> 10. wet | <input type="checkbox"/> 25. with 4 legs |
| <input type="checkbox"/> 11. dry | <input type="checkbox"/> 26. with 8 legs |
| <input type="checkbox"/> 12. soft | <input type="checkbox"/> 29. with wings |
| <input type="checkbox"/> 13. hard | <input type="checkbox"/> 30. Oval |
| <input type="checkbox"/> 14. heavy | |
| <input type="checkbox"/> 15. Red | |

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Discovery Hunt *Version 2*

INSTRUCTIONS: A site with a lot of biodiversity has a wide variety of plant and animal species. Search for evidence of biodiversity on your site. Work in teams on the following biodiversity tasks. Your teacher may assign specific tasks to each team.

Record your answers in your club journal or on the back of this discovery hunt.



BIODIVERSITY ECO-SERVICE TASKS:

1. Find a plant and describe its habitat.
2. Find a change to your school site made by humans that decreased its biodiversity.
3. Find a plant predator.
4. Make a temperature map of a biologically diverse area.
5. Make a temperature map of a non-biologically diverse area.
6. Collect wild seeds on your site. Describe them; label their parts.
7. Locate unusual or rare plants on your school site. Try to identify them.
8. Make a list of plants that you could add to your school site to increase the biodiversity.
9. Name the five most common plants on your site.
10. Find three plants with protective parts such as thorns or stickers.
11. Find evidence of a plant's response to an environmental factor.
12. Find two flowers that look the same but smell different.

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Discovery Hunt *Version 3*

INSTRUCTIONS: Place an 'X' in front of each of the following signs of biodiversity that you can locate on your school site.



- Find a low-growing plant, a shrub, and a tree
- Find at least three different kinds of plants growing under one tree
- Find three leaves with different textures
- Find three different flowers
- Find three different kinds of plant stalks
- Find a site with a lot of plant biodiversity
- Find a place on your site that lacks plant biodiversity
- Find three different kinds of fruits
- Find an evergreen (leaves stay green all winter) plant
- Find a deciduous (loses its leaves in winter) tree
- Find three different seeds
- Find three different tree bark types

Biodiversity is Amazing Worksheet *Option 4*

Instructions: Select three different species to sketch and take notes on. See if you can find or make any direct connection between the different species you observe.

Species #1	Species #2	Species #3
Sketch: 	Sketch: 	Sketch:
Description/Features: 	Description/Features: 	Description/Features:
How it uses the ecosystem: 	How it uses the ecosystem: 	How it uses the ecosystem:

