













Plants and Animals

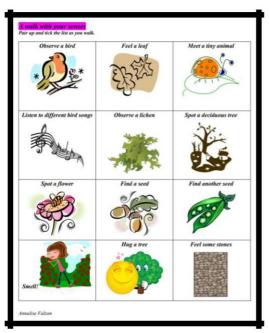


Activity 21- Plants and Animals-Nature Treasure Hunt

Activity	Nature Treasure Hunt			
Objectives	1)To use different senses to increase observation skills. 2)To distinguish living and non living things. 3)To increase awareness of one's surroundings			
Subject	Science, Social Studies			
Age Group	6-10			
Individual or Group Activity	Group			
Classroom or Field Activity	Field			
Duration of	30 minutes as part of an outdoor field trip			
Activity	Suggested as a warm up activity to get students focused			
Materials	Mini nature Treasure Hunt handout per team Magnifying glasses Outdoor space with a little variety of nature elements			

Method

- 1) Identify a suitable safe outdoor space.
- 2) Always go through the Green Country Code for respecting the outdoors and set a time limit for completion of activity.
- 3) Students pair up and tick the list as they walk to your next activity destination.
- 4) A magnifying glass may be helpful.



- 5) At the end of the walk meet up in a circle and ask how many ticked all the list and follow-up with questions:
- 6) What senses did you use?
- 7) What was most difficult to find?
- 8) Can you describe any 2 living things from your ticked list to all the group?
- 9) Can you mention any non-living things you observed along the way?
- 10) End with a seated silent exercise for at least 1 minute with eyes closed followed by a minute in silence but with eyes open observing upwards (we were mostly looking down on our walk). How do you feel in silence?
- 11) At the end include a reflection on the variety of living things, shapes, sizes, colours these show us all the diversity around us and it can be linked to human diversity.

Resources

Worksheet Activity

Activity 21 (English)

FOF

Activity 21- Nature
Treasure Hunt.pdf

Activity 22- Plants and Animals-Tech Nature Outdoors

Tech Nature Outdoors			
L)To explore how plants and animals share the major habitat and which kinds live n which sort of habitat in Malta. 2)To observe, identify and record wildlife in my area.			
Science, Art, Digital Literacy			
9+			
iroup			
Field			
2hours + Allow time to roam for longer especially if it is an area rich in biodiversity			
Tablet /camera per team Laminated picture sheet of your local flora according to season and reg (check online flora resources for your locality or use a guidebood Digital Apps to be pre downloaded and tested by teacher in the field to see suitability according to location, level of difficulty, if Wi-Fi is needed to use it etc Some apps allow you to download the day so you can use without WiFi. Some suggestions are as follows be check also for any local apps in your region. Birdwatching App: https://merlin.allaboutbirds.org/download/ (see explanatory video here: Explore Merlin Bird ID App - eBird Essent-YouTube) Flora ID App: Pl@ntNet identify (plantnet.org) Additional: Ideally have a set or two of binoculars			

Method

- 1)Preparation: Identify a suitable and safe nature trail which allows space to roam.
- 2)Familiarize yourself with the wildlife which is most easily encountered in the specific season and habitat you will be visiting.
- 3)Download and test Apps and include a preparatory lesson about them before the field visit.
- 4) At the start of the nature walk outline the Green Country Code and any additional regulations if you are in a protected area. Check all equipment is working well.
- 5)Start with a seated silence exercise and ask students to close their eyes to focus on the sense of hearing. Repeat the exercise but now ask students to try and identify bird sounds and their direction. each team can then branch out and try to record by sound and images the birds noticed and try to identify them using the app.
- 6)Gather students for feedback circle and ask on level of difficulty. Why is it difficult to observe birds?
- 7) Move on to next exercise this time focusing on indigenous flora:
- 8)Hand out printed Flora ID sheet (example below) to each team of 3 and assign tasks: one student to make use of app, one to focus on photos/recording, one focusing on ID sheet and ticking off any plants seen. Start your hunt and set a time limit for example to find 5 species from your list and record them by taking photos*.





9)Next exercise introduces the digital app - challenge the students to find at least another 5 plants they do not know the name of and which are not on the ID sheet and see if the digital apps can help with identification.

	10)Follow up: All photos taken during the visit are to be put up in a collage with the
	names of the plants. Any unidentified plants can be researched when back in class.
	*Modifications: Photography can be replaced with an outdoor art class with sketching equipment - the first part of identifying the flowers can be done either by an app on the phone or with simple Photo ID of some common plants in your area. The task would be to first identify some plants and then draw them in the field.
Important info	Always have with you any important phone numbers in case you encounter any injured wildlife.
Resources	Activity 22-TechNature Outdo

Activity 23- Plants and Animals-Earthbound Hideout

Activity	Earthbound Hideout - A digital Scavenger Hunt for outdoor learning
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Objectives	1)To observe and connect with the surrounding environment using different senses;			
	2)To develop the skills of mapping and planning spaces			
	3)To introduce students to the Sustainable Development Goals on Good Health and Wellbeing (3); Sustainable Cities and Communities (11); Life on Land (15)			
Subject	Science			
Age Group	9+			
Individual or Group Activity	Group			
Classroom or Field Activity	Field			
Duration of Activity	2 hours +			
Materials	Download the Teachers Booklet from Get Active - Bound Around! - Friends Of the Earth Malta (foemalta.org) 1 sheet of A4 paper per student 1 A3 chart per team Wi-Fi before leaving school			
	Outdoor safe space with a bit of nature Students should bring clipboard and coloured pencils			

Method 1)See Teachers' Booklet for all information needed - Page 24-33 (in English only) Get Active - Bound Around! - Friends Of the Earth Malta (foemalta.org) Game can be followed up with workshop (all materials included in booklet) 2) Main themes of the game are: Rewilding - the importance of having 'wild' spaces Sense of place - our connection to the space around us Environmental psychology - the benefits of nature on our wellbeing Environmental issues - benefits of greener urban areas for climate issues on local scale. Earthbound HIDEOUT

Activity 24- Plants and Animals-Marine connections

	Activity	Marine connections
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Objectives	1)Understand how everything is linked together 2)Understand basics of a food web and what disturbs it 3)Realise the importance of healthy ecosystems			
Subject	ience			
Age group	7+			
Individual or Group Activity	Group			
Classroom or Field Activity	Classroom/ Outdoors			
Duration of Activity	45 mins x2 sessions			
	Lots to see in the Sea Video (or similar) https://youtu.be/HplVoqtliak			
Materials	Ball of string / long ribbon			
	5 Pictures or soft toys of different marine animals in the world			
	Pictures / samples of seagrasses and corals			
	Large picture of a food web			
	World Globe			

1)	This activity can be preceded by a lesson on food chains FoodChainGame.pdf (uwsp.edu)
2)	Guess the animal - start lesson with a mime game on guessing the animal. Assign a marine soft toy/picture to a student and ask to min what it is to the rest of class. When all animals are guessed ask the to identify what habitat we will be talking about in the lesson.
3)	Show class some samples or pictures of the Neptune seagrass (<i>Posidonia oceanica</i>) and ask then if they know what this is and v it does.Draw comparison of seagrass meadows with land forests accentuate production of food and oxygen for rest of the sea inhabitants.
4)	Watch a video on marine life before starting the next activity. Example: Lots to see in the Sea Video (or similar) https://youtu.be/HplVoqtliak
5)	Stand in a circle and ask each student to think of being one marin plant or animal. Assign seagrasses to one student who will start to string web. this students passes on string to another one and ask what he or she is. each student must call out what creature they when they receive the string. Keep passing it around to create a web where all hold on to the string.
6)	The teacher, who is outside circle, then starts to describe change the marine habitat. And calls out different creatures and explains what impact the issue is having, Example - the sea is warming up Seagrasses do not like the change in temperature. You must therefore let the string go.
7)	Use examples such as sea acidification, alien species increasing ir warmer waters, bleaching of corals, overfishing, pollution until or by one the web collapses.
8)	Discuss outcome. When was the web stronger? what can be done to strengthen it?
9)	Draw posters together to show abundance of life in a healthy occ

Activity 25 -Plants and Animals-Animals find their home

Activity	Animals find their home			
Objectives	Understand the diversity of life and importance of healthy habitats			
Subject	Science, Art , geography			
Age Group	6+			
Individual or Group Activity	Group			
Classroom or Field Activity	Class			
Duration of Activity	40minutes			
Materials	World animals (soft toys etc) boxes/mats to represent different biomes World Globe or google Earth https://earthobservatory.nasa.gov/biome			

Method	1)	https://www.leapfrog.com/en-us/learning-
	,	path/activities/biome-boxes-game

- The globe can be integrated within above lesson to add some mapping skills for older age groups by identifying possible locations of different biomes. This website can help https://earthobservatory.nasa.gov/biome
- 3) At the end of the lesson the students can have an art project where they create on computer or as a drawing one different habitat per team and include the animals they chose..

Activity 26- Plants and Animals-Know your Natural Areas

Activity	Know your natural areas!			
Objectives	ocus on Mediterranean habitats and biodiversity dentify and get to know protected areas in your region			
Subject	Science, Geography, Digital literacy, (Art)			
Age group	9+			
Individual or Group Activity	Both			
Classroom or Field Activity	Field			
Duration of Activity	2 Lessons/ Site Visit			
Materials	Video on Mediterranean Flora: Mediterranean vegetation - how plants survive - YouTube Mediterranean Flora powerpoint or posters Any posters on protected species would be useful Online access to search for pictures Map of your country Any inspiring video of protected areas in your region Natura 2000 Viewer (europa.eu)			

Method

This activity should be preceded or followed up by an actual visit to a nearby protected area.

Part 1 - Discover Mediterranean habitats, flora and fauna

Divide the class into 4 teams. Each team will represent one of the following Mediterranean habitats and should be given a list of associated species:

- 1. Evergreen Woodland
- 2. Maquis
- 3. Garigue
- 4. Steppe

Each team needs to create a labelled poster collage with photos of the habitat and the associated species. Set a time limit and at the end each team showcases the findings.

Part 2 - Focus on protected areas

Start with the question: Why are some species protected? Can you name any protected species in your country?

Introduce concept of Natura 2000 protected areas in EU and discuss why such areas are important. Explain how to use the Natura 2000 online viewer *(see below) and allow some time for students to explore in teams of 2. Assign instructions and task to each team.

Each team should focus on one protected area of their region as assigned by the teacher. They need to find it on the Natura 2000 map and then mark it on the teacher's country map. Find at least 3 photos of the site, 3 types of plants and 3 species of animals found in this protected area. A digital collage is created with labelled photos. Each team showcases findings.

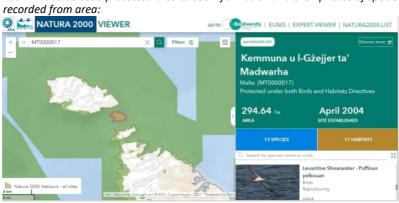
End with a discussion on why we need protected areas and ask if any students have ever visited one.

*Natura 2000 Viewer of EU internationally protected areas

Zoom in on protected areas in your region by visiting the Natura 2000 network of protected areas map: Natura 2000 Viewer (europa.eu)



Zoom in and select a protected area to see information and even photos of species



The full information and available pictures can then be viewed by clicking top right corner "Discover more": Example of Information page with photos for the protected Kemmuna island in Malta Site (europa.eu)