

SDG15 Seeding Sustainability

MM3: Examining Edible / Medicinal Plants



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Research and Development

Lesson 1: Biota, Flora and Fauna

Subjects: English, Geography, Home Economics, Irish, Science, SHPE

Lesson Title and Summary: Biota, Flora and Fauna

Biota is the term used for complete forms of life like bacteria, for example. Flora and Fauna are scientific words. In general, we use the term plants and animals life. The ecosystem is the biological community where the living beings interact with each other, from microorganisms to human beings. Flora and Fauna also contribute significantly to the ecosystem of the Earth. This lesson will build and consolidate key vocabulary that learners will use throughout the module. It encourages the development of research skills to develop an awareness of the different types of edible plants that can be found growing in Ireland.

Vocabulary: Biota, Edible, Flora, Fauna, Inedible, Medicinal, Perennial, Pollinators

In this lesson, the learner will:

- develop recording, analysis and evaluation skills
- explore and discover the meaning of biota, flora and fauna
- summarise information to create definitions
- create a digital vocabulary reference document
- match examples of wild Irish edible flora commonly foraged to their possible uses in food preparation and confirm ideas by accessing online information
- consider uses and create recipes
- develop collaboration and communication skills

Materials

- Flipped Classroom Task: Biota, Flora and Fauna
- Worksheet: Wild Irish Edibles
- Internet access



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ACTIVITY INSTRUCTIONS

Activity 1: Vocabulary Consolidation- Biota, Flora, Fauna Flipped Classroom Task (15 mins)

Learners need to complete the *FLIPPED CLASSROOM TASK* (Biota, Flora, Fauna) before this activity.

- 1) Divide learners into groups of 4.
- 2) Compare digital vocabulary guides (*FLIPPED CLASSROOM TASK*) in small groups and add new ideas and examples.
- 3) Play a 3-4 minute game of taboo to review vocabulary. This can be played as a whole class, or in groups of 4.

TABOO

1. Select a word from the list (Flipped Classroom Task).
2. Describe the word, without using it!
3. Other players need to guess which word is being described.

Activity 2: Wild Irish Edibles (35 mins)

- 1) Divide learners into groups of 4 and direct them to the Wild Irish Edibles Worksheet. Go through the instructions and check understanding. Assign 4 words per group.
- 2) Instruct learners to look at the images and common names of some Irish edible flora, and match them to what they think the plants could be used to make.
- 3) Ask learners to check their ideas by accessing the [Wilderness Ireland Website](#) - see Media Box.
- 4) Use the discussion questions on the worksheet to share ideas in pairs.

REFLECTIVE EXERCISE: 3-2-1 (10 mins)

- Three things they feel they have learnt from the tasks.
- Two things they found most interesting and would like to explore more.
- One – their opinion they have about the tasks.

Use Post-its or a mentimeter survey - www.mentimeter.com - to gather reflections

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EXTENSION / REDUCTION ACTIVITIES:

Reduction: For a shorter lesson, complete Activity 1 only. Increase the length of time to play TABOO and work in groups to add new words to the vocabulary guide. A new column could be added to the guide- synonyms. Activity 2 can be completed in the next lesson.

Extension: For a longer lesson, spend more time on Activity 2; identifying possible edible uses for the wild flora (e.g., in ice-cream) and create a recipe of their own to later make.

MEDIA BOX (materials, online video links, extra resources, case studies etc)

Wilderness Ireland - Wild Foraging in Ireland <https://www.wildernessireland.com/blog/wild-foraging-ireland/>

12 Rules to follow when Foraging <https://www.tyrantfarms.com/beginners-guide-to-foraging-rules-to-follow/>

'Foraging Seaweed Spaghetti' (2:03 min) <https://youtu.be/cZeieNZopxk>

'Dandelion Coffee' (4:04 min) <https://youtu.be/P3n2iymAjAI>

'Irish Herbs, plant medicines growing in Dublin, Ireland' (14:00 min)
<https://www.youtube.com/watch?v=cLfcvi2i3x4>

LOCAL TRIP / EXPERTISE / ADDITIONAL WORK AND ASSESSMENTS

Look around the school to discover how many overlooked edible / medicinal species there are.

Visit a local herb garden and take a tour from a member of Tidy Towns or local botanist.

Take a trip to the coast to forage for sea spaghetti, sea kale or sea lettuce to prepare in Home Economics class.

Interview a local farmer/ garden centre and find out the vegetables and herbs that are grown.

MM3 L1 WS: BIOTA, FLORA AND FAUNA



FLIPPED CLASSROOM TASK (BIOTA, FLORA AND FAUNA)

Task:

Create a digital vocabulary guide on the theme of “Biota, Flora and Fauna”. This could be in the form of a Word or Excel document, a Google Jamboard, or a Mind Map.

Using a dictionary look up the following words.

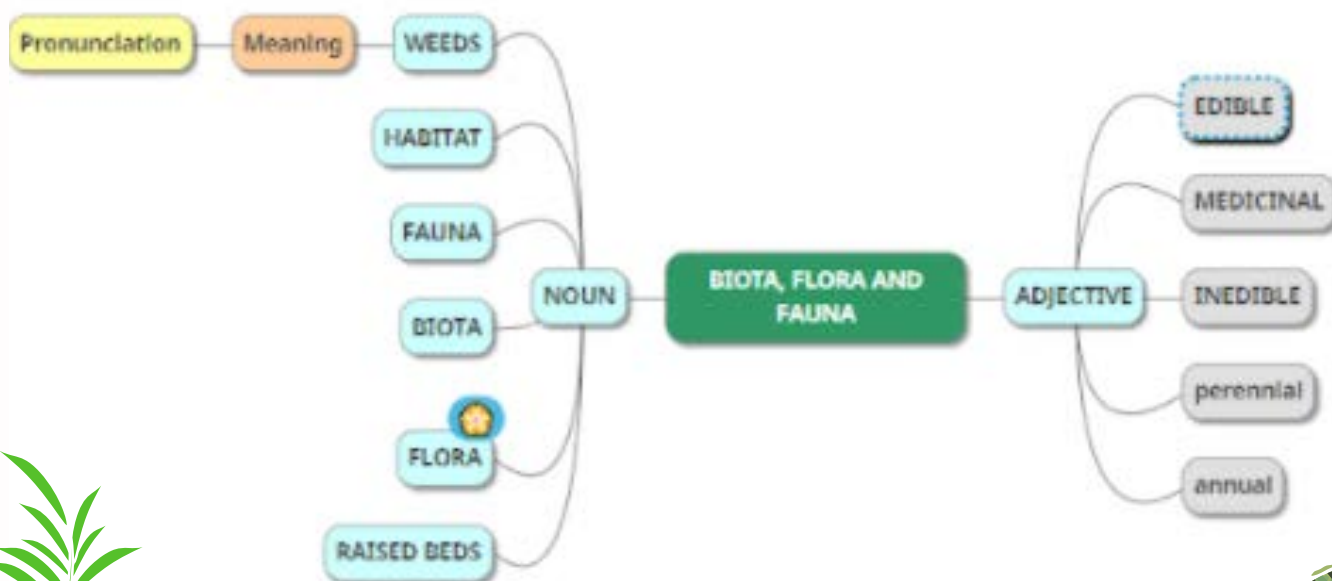
- Identify the part of speech (action/state word - verb, describing word - adjective etc.)
- In your own words define the meaning and give an example in context

VOCABULARY

biota	perennial	herbs
flora	annual	edible/inedible
fauna	raised plant beds	medicinal
habitat	weeds	pollinator

Here is a Word table and Mind Map example of how you could create your digital vocabulary guide.

WORD	PART OF SPEECH	MEANING	CONTEXT
biota	noun	The animal and plant life of a particular region, habitat, or geological period.	We still have a lot of the Earth’s biota to save.





WILD IRISH EDIBLE FLORA WORKSHEET

NB: You should only harvest and consume plants if you are 100% certain that it is okay to do so.

Ireland has an array of delightful edibles.

1. Look at the following images of Irish edibles and match them to what you think they could be used to make.

SALADS	SOUPS	PESTOS	COFFEE/TEA
 <p>Dandelions</p>	 <p>Sea Spaghetti</p>	 <p>Stinging Nettles</p>	
 <p>Curly Dock Leaves</p>	 <p>Wild garlic</p>	 <p>Hawthorn Leaves/Flowers</p>	
 <p>Wood Sorrell</p>	 <p>Bramble Leaf</p>	 <p>Wild Mint</p>	

2. Now access the following Website and check your ideas. Were you correct?

<https://www.wildernessireland.com/blog/wild-foraging-ireland/>

3. Paired Discussion:

- What did you learn that was interesting or surprising?
- Which would you like to try?
- Have you tried any of these before?
- How do you think you could use these ingredients to make a new drink or snack?
- Would any of these edibles work well in ice cream? What kind of flavours would they add?





WILD IRISH EDIBLE FLORA WORKSHEET: ANSWER SHEET

Salads

Dandelions
Fresh Hawthorn Leaves and flowers
Wild garlic
Curly Dock Leaves

Soups

Wild Garlic
Stinging nettles
Sea spaghetti

Pestos

(base of greens or leaves, some kind of nut (pine nuts, walnuts, almonds, whatever you like), and olive oil. Cheese is optional but generally preferred.)

Wood Sorrell
Wild Garlic

Tea/Coffee

Wild Mint
Stinging Nettles
Bramble leaf tea
Roasted Dandelion Root

Encourage learners to make / taste an edible recipe from the list ensuring that the core ingredient is the correct species.

