

# Seasons of the year in the Botanical Garden

## 1 Overall aims:

- To observe the vegetation from different regions (choose which of the different there are) See [map](#)
- To know some Mediterranean plants from different parts of the world (diversity of shapes, colors, measures...)
- To promote botanical and naturalist culture in children (growth, life cycle...)
- To promote knowledge and respect for nature
- To promote the curiosity for nature
- To explore the nature with senses (observe, smell, touch)

## 2 Vocabulary - keywords

Vegetation, Mediterranean plants, respect, garden, science museum, botanical garden, smell, senses

## 3 Sustainable abilities developed

- Systemic thinking competency (to recognize and understand the map)
- Anticipatory competency (to understand and make predictions or hypothesis)
- Strategic competency (to observe with curiosity)
- Normative competency (to understand the norms and values of one's action)

## 4 Pillars of sustainability included

- Economic (go on foot or in public transport)
- Ecologic (respect for nature, climate change-region)
- Social (native plants- relationship between nature and ways of life, changes and diversity)

## 5 STEAM domains

S (Mediterranean vegetation), T (exploring nature with senses), A (pictures of nature), M (shapes, colors, texture and sizes)

## 6 Teaching methodologies/activity outline

STEPS



**Beginning**

1. Classroom. Prepare the visit before selecting the workshops and the aims of them

**Development (Outdoor in the Botanic Garden)**

2. Observe the different regions with Mediterranean vegetation: similarities, differences.
3. Make questions to children about the plant growth, life cycle, colors, shapes, textures, smell...
4. Make hypotheses with children and check them if it is possible
5. Notice the relationship between living beings and environment
6. Take pictures or draw pictures

**Closing Outdoor and at classroom**

7. Reflection: Can you explain what has happened? Why? What do you hope for?
8. Explain to others and families through pictures and titles

## 7 Expected learning outcomes

**The child will be able to:**

- To be guided with a simple map
- To observe in direct contact with nature
- To discover Mediterranean vegetation (similarities and diversity depending on region-climate)
- To register data (drawing, pictures...)
- To explore with senses, make questions, check hypotheses
- To show initiative, curiosity and respect for environment

## 8 Assessment

Initial assessment. *What does he/she know about Botanic Garden?*

- What is a botanic garden? What can we find in it?
- Do you know some nouns of the Mediterranean plants?
- How is the cycle of life of plants?

Formative assessment (through observation with rubric based on aims). *What is he/she learning? In the process*

- Does he/she use the map as a guide?
- Can he/she identify the main Mediterranean vegetation?
- Can he/she establish similarities and differences?
- Is he/she able to explore using his/her senses?
- Does she/he enjoy the activity showing curiosity and initiative?
- Is she/he able to make questions and hypothesis?
- Is she/he able to explain or argue to others?



	<p>Summative assessment. <i>What has he/she learned? After the process</i></p> <ul style="list-style-type: none"> <li>• Does he/she use the map as a guide?</li> <li>• Can he/she identify the main Mediterranean vegetation?</li> <li>• Can he/she establish similarities and differences?</li> <li>• Is he/she able to explore using his/her senses?</li> <li>• Does she/he enjoy the activity showing curiosity and initiative?</li> <li>• Is she/he able to make questions and hypothesis?</li> <li>• Is she/he able to explain or argue to others?</li> </ul>
<p><b>9</b></p>	<p><b>Equipment and materials to be used in learning unit (tools, ingredients etc)</b></p> <ol style="list-style-type: none"> <li>1- Human resources (teachers, guides)</li> <li>2- Digital Blackboard</li> <li>3- Paper, pencil and pencil colors</li> <li>4- Maps</li> <li>5- Camera</li> <li>6- Plants/ vegetation</li> </ol>
<p><b>10</b></p>	<p><b>Kind of setting - lab, kitchen, outdoor etc.</b></p> <p>Beginning</p> <ol style="list-style-type: none"> <li>1- Classroom- Digital Blackboard</li> </ol> <p>Development</p> <ol style="list-style-type: none"> <li>2- Outdoor -Botanic Garden</li> </ol> <p>Closing</p> <ol style="list-style-type: none"> <li>3- Outdoor- Checking and explain</li> <li>4- Classroom- Reflection</li> </ol>
<p><b>11</b></p>	<p><b>References - source:</b></p> <p>Botanical Garden of Barcelona (Natural science museum):  <a href="https://museuenciacies.cat/en/the-nat/venues/botanical-garden-of-barcelona/">https://museuenciacies.cat/en/the-nat/venues/botanical-garden-of-barcelona/</a>          Brochure: <a href="https://museuenciacies.cat/wp-content/uploads/2020/06/FULLETO-JARDI-ENG.pdf">https://museuenciacies.cat/wp-content/uploads/2020/06/FULLETO-JARDI-ENG.pdf</a></p>

