

Didactic scenario

1. Title

Olive: The “Golden fruit” of our country

2. Keywords

Olive, oil, tree, fruit, peace, place

3. Basic information

STEAM Subject: Science (Arts, Math)

Typical interaction time with the educational scenario in the teaching hours for in-school work: 2 teaching hours

General description of the scenario:

Phases	Stage	Time
The olive tree around us	Preparatory stage	25'
The precious gold of our country	Implementation Stage	30'
Games with the olive	Evaluation Stage	35'

Age group: 7 years old, 2nd grade in the Greek educational system

Estimated difficulty level :

Too easy	Easy	Moderate	Challenging	Very Challenging
	X			

Teaching resources

Material: Student's book and workbook Environmental Studies, worksheets, bookmarks-cards

with the main parts of the olive tree (mental supports) magnifying glass, olive branch, olive fruit, scale, ruler, olive oil, paper cube, pastry paints, glass container, large roll of paper (by meter), oil paints

School infrastructure: computer connected to the internet, video projector and projection screen

Additional material from external sources/online tools:

- Powerpoint with artwork and background information on the topic under discussion
- Antonio 's "Four Seasons" Vivaldi https://www.youtube.com/watch?v=445a_9O8mSM
- "The Battle of Athens" <https://www.youtube.com/watch?v=O7U61C8gvig>
- "How we get the oil" <https://www.youtube.com/watch?v=FQ0LvDt6lZA>
- The olive tree in poetry
<https://ennepe-moussa.gr/%CF%81%CF%8E%CF%84%CE%B7%CF%83%CE%B1-%CF%84%CE%B1-%CF%80%CE%BF%CE%B9%CE%AE%CE%BC%CE%B1%CF%84%CE%B1/%CE%B7-%CE%B5%CE%BB%CE%B9%CE%AC-%CF%83%CF%84%CE%B7%CE%BD-%CF%80%CE%BF%CE%AF%CE%B7%CF%83%CE%B7-%CF%80%CE%BF%CE%B9%CE%AE%CE%BC%CE%B1%CF%84%CE%B1>
<https://www.elniple.com/%CF%80%CE%B1%CF%81%CE%BF%CE%B9%CE%BC%CE%AF%CE%B5%CF%82-%CE%B3%CE%B9%CE%B1-%CF%84%CE%B7%CE%BD-%CE%B5%CE%BB%CE%B9%CE%AC-%CE%BA%CE%B1%CE%B9-%CF%84%CE%BF-%CE%BB%CE%AC%CE%B4%CE%B9/>
- Colored oil and water <https://www.youtube.com/watch?v=EMKyCe7WPZQ>
- " Which liquid will be absorbed faster?" <https://www.youtube.com/watch?v=kWhZk3b3Eh8>
- Activities of graduated difficulty at :
<https://wordwall.net/el/resource/63157915/%CE%B5%CE%BB%CE%B9%CE%AC>
<https://wordwall.net/el/resource/7280083/%CE%B1%CF%80%CF%8C-%CF%84%CE%B7%CE%BD-%CE%B5%CE%BB%CE%B9%CE%AC-%>

<https://wordwall.net/el/resource/17713787/%CF%84%CE%B1-%CE%BC%CE%AD%CF%81%CE%B7-%CF%84%CE%BF%CF%85-%CF%86%CF%85%CF%84%CE%BF%CF%8D-%CE%B5%CE%BB%CE%B9%CE%AC>

<https://wordwall.net/el/resource/6913423/%CE%B7-%CE%B5%CE%BB%CE%B9%CE%AC>

<https://wordwall.net/el/resource/53462937/%CE%B5%CE%BB%CE%B9%CE%B1>

TuxPaint program

Developed by: Mitsi Polyxeni, Papastergiou Eleftheria

4. Educational Problem

The students of the classroom are familiar with olive oil from their everyday life and there are olive trees in many places in our country. Taking into consideration that students have a basic prerequisite knowledge, the teacher will provide the opportunity for the students to come into contact and get to know the olive as a fruit, as a tree and its derivatives through the appropriate content displayed as well as from the experimental process and the discovery process. The children will watch the oil production process, they will think about and discuss the value of the olive, they will make observations, measurements and comparisons with a magnifying glass, scales and a ruler while through experimentation they will get to know the basic characteristics and properties of olive oil. Considering the age and experience of the students, teacher will propose the free drawing program (TuxPaint). Students have developed basic computer skills from previous lessons and are familiar with the basic functions of TuxPaint where they can express themselves freely and creatively.

5. Learning objectives

1. To expand their knowledge about the olive in its natural environment
2. To understand the importance of olive production in the local economy
3. To understand the value of the olive and its derivatives for our lives
4. To observe, to compare , to make assumptions and conclusions
5. To improve cooperation and communication skills.

6. Phases of the Scenario

Phase 1

Title: The olive tree around us

Indoor	Outdoor	Mixed
		X

Phase duration in minutes:25'

Detailed description of the scenario phase:

The lesson will be held in the computer lab. Initially, the students will watch a PowerPoint shared on the video projector that the teachers have prepared and which includes famous works of art that use the olive as their main element. As long as the viewing of the works of art takes place, it is heard from YouTube classical music ("Autumn" from Antonio 's "Four Seasons" Vivaldi). Questions and plenary discussion will follow. Then, following the link, the students watch the Myth of Athens. Then, in plenary, students discuss, the value and importance of olive in our lives. After that, students follow the relevant link to watch a video that describes the production of olive oil and relevant questions will be discussed in plenary. The presentation of the PowerPoint continues with basic information regarding the subject such as: olive in our religion, basic characteristics of the olive, symbolism, olive and time, etc. Having studied the section of the student's book that refers to Plants, any misunderstandings are explained by the teacher and the students are prepared for the next activity.

Activity sheets: Questions to be orally answered.

Phase 2

Title: The precious gold of our country

Indoor	Outdoor	Mixed
		X
Phase duration in minutes: 30'		
<p>Detailed description of the scenario phase:</p> <p>(Experiment information and instructions are in the accompanying slide show file). Once any misconceptions are clarified, students in groups read, study and discuss poems and riddles that refer to the olive tree. Following the principles and philosophy of Differentiated Instruction students will work in groups of mixed abilities and each group will be asked to make collaboratively a creation using specific material. More specifically, one group will present a text, another a short poem, a drawing, a riddle, an acrostic. Afterwards, each group presents to the plenary the poem they had worked on as well as their creation. Then, the students are taken to the corner of the classroom that has been suitably configured for conducting experiments and come into contact with the olive branches, fruits, bottle of olive oil and olive leaves. This activity will be carried out with the technique that is often chosen in differentiated activities and is that of the "cube". Cubing is a flexible and easy-to-use differentiation technique that invites students to examine a topic from different perspectives. Students are given a cube whose six sides represent a different question or activity. The cubes in this case will be individual tasks. Each student rolls the dice once and performs the activity shown. If he does not like the particular activity he has the option to roll his dice one more time. Each student will roll the dice 2 to 4 times depending on the number of activities that the teacher has decided. More specifically, the teachers have built a cube where a different task is mentioned in each seat, e.g. count, weigh, classify, calculate, describe and compare. Then, using a magnifying glass, ruler and scale, they observe, measure, weigh, compare and record on a relevant worksheet - of graded difficulty - prepared by the teachers. Once this activity is completed students discuss and reflect. Then the students will carry out an experimental process where they will mix oil and pastry color and then after adding drops of in the water in a large bowl of water they will observe that drops will float and not dissolve. A second experiment that will be implemented is one that shows which liquid absorbs faster, water, oil or alcohol. The students, with the help of the teacher, will put three napkins on a cardboard and pour oil in the first one, water in the second one and alcohol in the third one. Children should observe which liquid will be absorbed the fastest. Reflection and discussion in plenary session.</p>		
<p>Activity Sheets:</p> <p>Links and instructions for the implementation of the activity</p> <p>Worksheet in the folder SCIENCE 3 Additional resources for the teacher</p>		
Phase 3		
Title: Games with the olive		

Indoor	Outdoor	Mixed
		X
Phase duration in minutes:35'		
<p>Detailed description of the scenario phase:</p> <p>In the third and last phase of the teaching scenario, which concerns the evaluation, activities of graded difficulty will be implemented, a philosophy that permeates the content of the specific teaching scenario. The first two activities are expected to be successfully implemented by all children. More specifically, students will follow the links below and be engaged in creative and playful activities receiving immediate feedback. The first activity is a memory game about the olive tree. The second activity concerns the olive oil production process where the students will draw and place the pictures in order.</p> <p>https://wordwall.net/el/resource/63157915/%CE%B5%CE%BB%CE%B9%CE%AC https://wordwall.net/el/resource/7280083/%CE%B1%CF%80%CF%8C-%CF%84%CE%B7%CE%BD-%CE%B5%CE%BB%CE%B9%CE%AC-%CF%83%CF%84%CE%BF-%CE%BB%CE%AC%CE%B4%CE%B9</p> <p>Then using the TuxPaint program, in which children are familiar with and have used in the past, they will create their own artwork. The students' creations will be saved, printed and posted in a prominent place in the room.</p> <p>Then, students will carry out activities of medium difficulty. The first activity will be held in pairs (name the parts of the olive by following the link). The second is a matching game (link listed below). In these activities, some students are expected to have difficulty. For this reason the teachers have prepared bookmarks and cards with the basic information where they function as mental supports and helping tips.</p> <p>https://wordwall.net/el/resource/17713787/%CF%84%CE%B1-%CE%BC%CE%AD%CF%81%CE%B7-%CF%84%CE%BF%CF%85-%CF%86%CF%85%CF%84%CE%BF%CF%8D-%CE%B5%CE%BB%CE%B9%CE%AC</p> <p>https://wordwall.net/el/resource/6913423/%CE%B7-%CE%B5%CE%BB%CE%B9%CE%AC</p> <p>The third activity concerns those children who have successfully completed the previous activities and are able to implement an activity of increased difficulty which concerns a quiz with questions based on everything mentioned in the teaching process. This activity can be found in the link attached below</p> <p>https://wordwall.net/el/resource/53462937/%CE%B5%CE%BB%CE%B9%CE%B1</p> <p>At the end, students will create a group project on the theme of the olive tree using oil paint and a large roll of paper (by meter). Children's works will be part of an olive-themed exhibition in the hall.</p>		

Activity sheets: Links and instructions for carrying out the assessment activities and paper of the measure with oil paints.

7. Evaluation Methodology

Initial: It takes place through guided discovery and discussion in the form of question-answer (What do we know about the olive tree?).

Formative: It takes place continuously in all phases, through questions and feedback from the activities of the course during the learning process.

Final: Activities of graded difficulty on wordwall and Hotpotatoes.

8. Additional resources for the teacher

Folder: Olive The “Golden fruit” of our country_ Additional resources for the teacher