

Full STEAM ahead for better education

Lesson plan

Third Class/9 YEARS

TEACHER: Mrs Theodora Tsegenidou



Title/ Τίτλος: CONSTRUCTING A THEMATIC MAP ON THE FIELD

Aim/Στόχοι	The pupils become competent observers of the structured surroundings of Mastichohoria (= villages on northern Chios with mastic gum trees). They also acquire orientation skills, reading skills and the skill to construct a map using the scientific method.
Tools I need/Εργαλεία	a compass, a map of the traditional village/settlement 'Vouno', landmarks on stickers, size A4 paper sheets, A4 size slides, permanents markers, mastic Chian gum
Preparations/Προετοιμασία	projecting a presentation and having a discussion about the Mastichohoria of Chios island, a lesson on maps (what they are, how we make them, map legends/keys, usefulness) in the Environmental Studies Lesson of the third grade
What to do/ Δραστηριότητες	transportation to the Mastichohori 'Vouno' – division in groups – orientation – observation of architectural elements, fortification works and natural phenomena on the way and construction of a thematic map
What I get / results/ Αναμενόμενα Αποτελέσματα	Construction of two thematic maps by the pupils themselves using the scientific method

The STEAM approach/ Προσέγγιση STEAM:

S	Search/Ερευνώ	<p>The pupils investigate</p> <ul style="list-style-type: none"> • the itinerary they have to follow based on the map • several elements (historic, architectural natural) in the structured setting • the advantages and drawbacks of the settlement
T	Think/Σκέπτομαι	<p>The pupils think about</p> <ul style="list-style-type: none"> • the use of durable materials • the exploitation of natural phenomena (draughts of air, light alternation, sound volume) in the building of the settlement • ways of achieving efficient intervention in the constructions that went wrong with a view to achieving sustainable development
E	Experience/Δοκιμάζω-Βιώνω-Εφαρμόζω	<p>The pupils experience</p> <ul style="list-style-type: none"> • the joy of working together, exploring and finally building their own thematic map • the natural phenomena while going under the 'koupastoi' (tunnel streets in the village)
A	Active learning/ Ενεργητική Μάθηση	<p>Practical implementation of knowledge and skills in the field:</p> <ul style="list-style-type: none"> • estimations • measurements • problem solving • spotting good and bad interventions • decision making

		<ul style="list-style-type: none"> organizing information in a map
M	Motivation/Κινητοποίηση	<p>Scenario with pirates and villagers which includes the heroes of the story-line, treasure hunt game (the treasure is the mastic gum), dramatizations, snapshots (frozen pictures)</p>

<p>Resources / Links: Πηγές</p>	<ul style="list-style-type: none"> A powerpoint presentation and printed material about the 'Mastichohoria' by the Environmental Education Centre 'Omiroupolis' on Chios The Environmental Studies Book of the 3rd grade
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Sixth Class/ 12 Years



TEACHER: Mrs Vorria Matula

Title/ Τίτλος: The Capstan Well : When the wheel spins...

Aim/Στόχοι	Measurements in space using measuring tape Developing the skill of solving math problems and their application in everyday life
Tools I need/Εργαλεία	measuring tape, music (for drama/acting games)
Preparations/Προετοιμασία	Visiting the place, imaginary scenario, working groups, worksheets, drama/acting games
What to do/ Δραστηριότητες	measuring length, surface, volume – the principle of the interconnected pipes
What I get / results/ Αναμενόμενα Αποτελέσματα	The pupils become acquainted with basic mathematical principles and how people have made good use of these principles in their everyday life. They are also asked to provide solutions to problems

The STEAM approach/ Προσέγγιση STEAM:

S

Search/Ερευνώ

The pupils improve their mathematical skills

T	Think/Σκέπτομαι	They use strategies to solve a problem
E	Experience/Δοκιμάζω- Βιώνω-Εφαρμόζω	They get to know the Capstan Well , which in older times was a special way of irrigating the orchards in the area of 'Kampos' on Chios.
A	Active learning/ Ενεργητική Μάθηση	The pupils count, estimate and play
M	Motivation/Κινητοποίηση	The pupils present what they have learned through a drama/acting game

Ressources / Links: Πηγές	
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