



Title/ Τίτλος: Support of life. Direct flow of water to plants.(Agricultural Engineering – Plants)

<p>Αιμ/Στόχοι</p>	<p>Learning of Exact Sciences through answers to Engineering challenges (construction of irrigation system of plants on the new planet without machine usage or human power. Plants absorb and transfer water (how).Different materials absorb water in different ways. The reason why plants help and they are necessary for life. Team work –Cooperation.</p>
<p>Tools I need/Εργαλεία</p>	<p>Simple ,cheap, everyday materials (for experiments) Worksheets, videos (PC)</p>
<p>Preparations/Προετοιμασία</p>	<p>Imaginary story (Colony on another planet) Construction of water pump and greenhouse. Solution of problem.</p>
<p>What to do/ Δραστηριότητες</p>	<p>Dramatization of a story. (Solution of challenge during its duration).Implementation in real conditions. Worksheets, board games, video projection. Experiments, construction of greenhouses, observation of plants and trees (roots).Dramatization of a story and solution of challenge during the story.</p>
<p>What I get / results/ Αναμενόμενα Αποτελέσματα</p>	<p>Watering of plants that the children themselves planted in the playground with the mechanism they made.</p>

The STEAM approach/ Προσέγγιση STEAM:

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Search/Ερευνώ

- How plants develop
- How water is transferred to the plants
- Why they are necessary for our life
- Ways of saving water(watering without mechanism or human power)
- Greenhouse operation

T	Think/Σκέπτομαι	What is agricultural engineering? How does it help? How do plants help and contribute to the development of life? The role of water.
E	Experience/Δοκιμάζω-Βιώνω-Εφαρμόζω	Children's ideas, discussion, experiments.
A	Active learning/ Ενεργητική Μάθηση	Construction of greenhouses with simple materials and the transfer of water to these with a mechanism without a machine or human intervention.
M	Motivation/Κινητοποίηση	Story dramatization. Solution of challenge in the story and implementation in real conditions.

Ressources / Links: Πηγές	10 instructive units of applied engineering in the Primary School (ENGINEER program).Evgenidou Foundation Institution site.
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