

LEARNING SCENARIO	
<b>School:</b> 1st Primary School Čakovec	<b>Duration (minutes):</b> 135
<b>Teacher:</b> Ivana Ružić	<b>Students age:</b> 9-12

<b>Topic:</b>	<b>PLANTING A TREE</b>
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<p><b>Aims:</b></p> <p>To make pupils understand how investment in the environment extensionally turns the world into more beautiful places.</p> <p><b>Outcomes:</b></p> <p>To teach how to plant tree To raise environmental education and awareness among pupils To provide an outdoor laboratory for pupils learning about tree growth To study how trees act as a windbreak and prevent soil erosion</p> <p><b>Work forms and methods:</b></p> <ul style="list-style-type: none"> <li>group work - documentation of all activities (photos, videos, notes)</li> </ul>
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ARTICULATION
<b>Course of action (duration, minutes)</b>
<p><b>INTRODUCTION</b></p> <p>Explore a trees in your region, how to grow and care for a tree, ways of using and exploiting Agree about how to collect materials and preapre a video about this activity</p>
<p><b>MAIN PART</b></p> <p>a) Determine the planting site. * Choose a location 15 to 20 ft. from the house, sidewalk, driveway and other trees. * Steer clear of overhead power lines. * Ensure there are no buried wires or pipes in the area.</p> <p>b) Mark the planting location. * Drive a wooden or metal stake into the ground at the center of the planting location. * Measure the diameter of the tree's root ball at its greatest dimension. * Cut a length of twine 1 or 1ó times the root-ball diameter (for example, a 2-ft.-dia. root ball requires 2 or 3 ft. of twine). * Loosely tie the string to the stake. * Hold a can of special line-marking spray paint, which works upside down, at the end of the twine. Pull the twine taut and swing a circle around the stake while spraying paint onto the ground. The goal is to create a circle that's two to three times wider than the root ball. (The twine represents the radius of the hole you'll have to dig.)</p> <p>c) Measure the height of the root ball. * Stand up the tree and loosen the burlap from around the base of the trunk. (Don't remove all the burlap just yet.) * Use a three-prong cultivator or small garden trowel to remove soil from the top of the root ball; dig away just enough soil to expose the root flare, which is the point where the trunk spreads out to the individual roots. * Measure the height of the root ball from the ground to the bottom of the exposed root flare. This distance will be the depth of your hole the idea is to keep the root flare exposed.</p> <p>d) Dig the hole.</p>

- \* Lay a plastic tarp near the site of the hole.
  - \* Use a pointed shovel to cut through the grass all around the perimeter of the painted outline.
  - \* Use a flat-blade shovel to remove the grass, which you can discard or transplant elsewhere. (Never backfill a hole with grass.)
  - \* Start digging, shoveling the soil onto the tarp so you can easily get it back into the hole when it's time to backfill.
- e) Measure the hole depth.
- \* Drive a stake into the ground next to the hole and tie a string onto it at grade.
  - \* Pull the string level across the hole and measure down from the string to the bottom of the hole.
  - \* If necessary, dig out more soil to reach the desired depth.
  - \* Use the shovel to scrape the bottom of the hole flat.
  - \* Sprinkle **superphosphate** into the hole to promote healthy roots. (Check the label on the superphosphate package for the right amount to add according to the size of the tree.)
  - \* Scratch the superphosphate into the soil with a three-prongcultivator or garden rake.
- f) Set the tree into the hole.
- \* Carry or roll the tree into the hole, making sure to support its upper branches.
  - \* Stand it upright, then step back and look at the tree. Have a helper rotate the tree as you look for its best "face."
  - \* Position the tree so its face is pointing in the most prominent direction--typically the street when planted in the front yard, or the rear deck, porch or kitchen window when planted in the backyard.
- g) Prep the root ball.
- \* If the root ball is enclosed by a wire basket, cut away the basket using bolt cutters or metal snips.
  - \* Cut and remove the twine from the root ball, then peel back theburlap. Use scissors or a utility knife to cut away as much burlap as possible. You don't have to remove the basket or burlap from the very bottom of the hole, which is difficult if the tree has a large, heavy root ball.
  - \* Use a cultivator or garden rake to scratch at the soil around the ball; this helps loosen tightly packed soil and expose the tiny roots.
- h) Backfill the hole.
- \* Spread superphosphate and 3-4-3 fertilizer onto the soil piled up on the tarp. (Use the amounts suggested on the packaging for the size of your tree.)
  - \* Use a rake or cultivator to scratch the two ingredients into the soil.
  - \* Mix up the soil with a shovel, then start shoveling it into the hole, making sure you don't bury the root flare.
  - \* When the hole is full, use the shovel to create a 6-in.-high curb of soil around the tree; this forms a crater to retain water.
  - \* Use a garden hose to fill the crater with water. Wait for the water to 3 be absorbed by the soil, then knock down the curb and smooth out the dirt with a rake.
- i) Water regularly or drip-irrigate.
- \* Spread 3 in. of mulch over the exposed dirt around the tree. Be sure to keep the mulch away from the trunk where mulch can trap moisture and promote rot.
  - \* Water the tree every day for at least six weeks to give the roots enough time to become fully established.
  - \* For a convenient alternative, hang two **drip-irrigation bags** from the tree's trunk. Fill each bag with water.
  - \* Check the bags for water each day, refilling as necessary. Keep the bags in place for six to eight weeks.
- j) create a video about this activity

**MAIN CONCEPTS:** investment, future, environment, save, tree

**FOLLOW UP:** There will be regular visits to planting area and pupils will take care of trees.

### CONCLUSION

Presentation of students movies.

Pupils are expected to care for the young trees they have planted and helped them to visit them regularly for necessary plant care. With this activity pupils will develop responsibility sense for environment and trees. It will raise awreness of protecting environment and working together.

#### **Methods**

*presentation*  
*talk*  
*interactive exercise / simulation on the computer*

*interview*  
*demonstration*

#### **Work forms**

*individual work*  
*work in pairs*  
*group work*

#### **Material/means:**



**Literature**

<http://www.wikihow.com/Plant-a-Tree>

<http://www.bhg.com/gardening/trees-shrubs-vines/care/the-properway-to-plant-a-tree/>

**PERSONAL OBSERVATIONS, COMMENTS AND NOTES**