Slow down education in the nature
Erasmus+ KA229 project

## General information

- School -Stalgene Secondary School
- Country -Lavia
- Subject - Math
- Topic - Measuring growing trees
- Teacher - Ilze Ērstiķe


## Measuring growing treesu

- Materials needed - worksheet, pencil, tape-measure
- Surrounding - Courtyard, garden, close to an area with trees



## Measuring growing trees

- Aims- build an understanding of how you can study trees in a park using mathematical skills.


## Activity 1

- 1.Pick out 2 trees with a friend, which you will study.
- 2.Without measuring (by eye measurement) complete the first column of the table.
- 3.Choose the necessary measuring tools and do the required measurements.


## Complete the table!



## Measurement

- Tree circumference. Remember to measure it $1,30 \mathrm{~m}$ from the ground!
- Tree height. To determine the height, you need a straight piece of wood (pencil, stick).How to do it? Your partner stands under the tree. Stand so you can see him/her and the tree in full view. Hold the piece of wood in a stretched out hand. Hold your arm so the feet of your partner are lined up with the tree trunk. Note their height on the piece of wood. Try to see how many times your friend's height fits into the height of the tree. Multiply the result with your partner's actual height.
- Tree age. The circumference of the tree is divided by 2,5 . The resulting figure shows how many years the tree.


## Evaluate the results! Discuss!

a) Were you able to determine the approximate measurement of the tree without measuring it?
b)Do you know a different method how to determine the circumference, height and age of a tree?
c) What did you learn new today?

## Gallery

- Other photos of the activities


