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| |  |  |  |  | | --- | --- | --- | --- | |  | **“GREAT ROUTES IN THE MIDDLE AGE AND THEIR SYMBOLOGY”**  **Nr. 2016-1-ES01-KA219-025035\_3** | Erasmus Middle Routes profila bilde |  |   Aija Pridāne |  |  |

**LEARNING UNIT**

**Scales and Units of Measurement**

**in the Middle Ages and Nowadays**

**Form** 7-9 (at the teacher's discretion)

**Subject:** housekeeping

**Objectives of the lesson**: To get acquainted with the ancient units of measurement and their applicability nowadays.

**Tasks**

1. In practical work, get acquainted with the ancient units of measurement to find out the correlations between different units of measure: weight, volume, length.

2. Exercise the transformation of ancient units according to the system adopted today.

3. To draw conclusions about the possibilities of using ancient units today.

**Methods: g**roup and individual work, practical work, presentation.

**Resources needed for the job**: worksheet, pen or pencil, calculator, ruler

**Content and activities:**

1. Students are divided into 3 groups by card - ruler, measuring scales, scales pictures cut as a puzzle (4-6 parts, according to the number of students in the class).
2. Working in groups

Each group acquaints with units of the same type, performs tasks on worksheets (1st, 2nd, 3rd group).

Task 1  
Group 1 looks at cards with pictures and determines for what measuring might be used these measurements and what is the relationship between images on the cards and ruler-cm, m.  
Group 2 looks at cards with pictures and determines for what measuring might be used these measurements and what is the relationship between images and weights in cards mg, g, kg  
Group 3 looks at cards with images and determines for what measuring might be used these measurements and what is the relationship between the images on the cards and the scales, l.

Task 2 - Practical work in the group  
1) pupils place the unit of measurement according to the image, paste it into the places specified in the work sheet;  
2) answer questions 2, 3 on the worksheet;  
3) Perform a small creative task - prepare one concrete example using the group's old units of measurement (for example: calculation of the quantity of menu items, calculation of the area of ​​the premises, etc.). Design it on a separate page.  
  
3. Presentation  
Students prepare a group presentation about their research and present them to other groups.  
  
4. Questions and answers / tasks for self-examination  
1) each group prepares 1-2 questions / tasks for other groups on the type of units they are studying;  
2) pupils in the group prepare an answer / perform tasks, compare results with results of other groups.  
  
5. Lesson closing part  
1) each group draws conclusions about the practical application of the ancient units nowadays;  
2) gives feedback on the information obtained in lessons and evaluates the work of his group during the lesson.

Homework or independent assignment for in-depth study of the substance individually or in groups. Find and view the information on the project website and / or other sources of information about the ancient units of measurement, to prepare a presentation, info graphic or to tell.  
  
Used information sources:

*Project homepage* [*http://greatmiddleroutes.x10host.com/*](http://greatmiddleroutes.x10host.com/)

*Solo mājai.* [*http://solomajai.blogspot.com/p/svari-meri-tilpumi.html*](http://solomajai.blogspot.com/p/svari-meri-tilpumi.html)

*Ancient measurements.* [*https://www.google.lv/search?biw=1366&bih=603&tbm=isch&sa=1&ei=sa0SW4byENHykwXV\_pvYBA&q=Sen%C4%81s+m%C4%93rvien%C4%ABbas&oq=Sen%C4%81s+m%C4%93rvien%C4%ABbas&gs\_l=img.3..0i24k1.192391.207490.0.207990.15.15.0.0.0.0.127.1456.8j7.15.0....0...1c.1.64.img..0.1.127....0.Piudq0ZfbqE#imgdii=tJd9keu\_hL6nBM:&imgrc=lC\_w3pMPJ23RkM*](https://www.google.lv/search?biw=1366&bih=603&tbm=isch&sa=1&ei=sa0SW4byENHykwXV_pvYBA&q=Sen%C4%81s+m%C4%93rvien%C4%ABbas&oq=Sen%C4%81s+m%C4%93rvien%C4%ABbas&gs_l=img.3..0i24k1.192391.207490.0.207990.15.15.0.0.0.0.127.1456.8j7.15.0....0...1c.1.64.img..0.1.127....0.Piudq0ZfbqE#imgdii=tJd9keu_hL6nBM:&imgrc=lC_w3pMPJ23RkM)*:*

*National ancient measurements.* [*https://www.google.lv/search?biw=1366&bih=603&tbm=isch&sa=1&ei=sa0SW4byENHykwXV\_pvYBA&q=Sen%C4%81s+m%C4%93rvien%C4%ABbas&oq=Sen%C4%81s+m%C4%93rvien%C4%ABbas&gs\_l=img.3..0i24k1.192391.207490.0.207990.15.15.0.0.0.0.127.1456.8j7.15.0....0...1c.1.64.img..0.1.127....0.Piudq0ZfbqE#imgrc=DZiLUKam2xn6dM*](https://www.google.lv/search?biw=1366&bih=603&tbm=isch&sa=1&ei=sa0SW4byENHykwXV_pvYBA&q=Sen%C4%81s+m%C4%93rvien%C4%ABbas&oq=Sen%C4%81s+m%C4%93rvien%C4%ABbas&gs_l=img.3..0i24k1.192391.207490.0.207990.15.15.0.0.0.0.127.1456.8j7.15.0....0...1c.1.64.img..0.1.127....0.Piudq0ZfbqE#imgrc=DZiLUKam2xn6dM)*:*

*Measurements*

[*http://praktiski.la.lv/collas-pintes-un-kortelis-seno-garuma-svara-tilpuma-un-skidruma-meru-skaidrojums/*](http://praktiski.la.lv/collas-pintes-un-kortelis-seno-garuma-svara-tilpuma-un-skidruma-meru-skaidrojums/)

*Seno mērvienību skaidrojumi*

[*http://www.vvk.lv/index.php?sadala=166&id=444*](http://www.vvk.lv/index.php?sadala=166&id=444)

*Explanations of ncient measurements*

[*https://padlet.com/Luize\_Juris/plroh0bak4bg*](https://padlet.com/Luize_Juris/plroh0bak4bg)

[*http://greatmiddleroutes.x10host.com/2017/04/28/activities-presented-in-trikala-5/*](http://greatmiddleroutes.x10host.com/2017/04/28/activities-presented-in-trikala-5/)

*Pictures*

[*https://www.google.lv/search?biw=1366&bih=603&tbm=isch&sa=1&ei=ZoLwWvv4G6WE6AT9rZW4Bg&q=spr%C4%ABdis&oq=spr%C4%ABdis&gs\_l=img.3..0j0i24k1.214496.217924.0.218418.8.7.0.1.1.0.140.662.1j5.6.0....0...1c.1.64.img..1.7.676.0..35i39k1.0.l3khl1xF4qA#imgrc=jeGap0BWgWrXeM*](https://www.google.lv/search?biw=1366&bih=603&tbm=isch&sa=1&ei=ZoLwWvv4G6WE6AT9rZW4Bg&q=spr%C4%ABdis&oq=spr%C4%ABdis&gs_l=img.3..0j0i24k1.214496.217924.0.218418.8.7.0.1.1.0.140.662.1j5.6.0....0...1c.1.64.img..1.7.676.0..35i39k1.0.l3khl1xF4qA#imgrc=jeGap0BWgWrXeM)*:*