## Subject: Maths

Number of the lessons: 5
Teacher: Regina Ratkevičiené
Topic: A number line. Coordinates plate.
Aim and objectives: Students will learn what a number line is, coordinates in it, will learn how to find point coordinates and what coordinates plate is and how to find point coordinates in it. Students will be able to:

1. Draw the number line and choose the right line.
2. In a number line mark a point, when the coordiantes are known, and write the marked point's coordinates.
3. Draw a coordiantes plate, write the points, marked in the coordinates plate, coordinates.
4. Mark points with known coordinates in a coordinates plate.

## Tools:

Computer with access to the Internet
Tablets with access to the Internet
Mobile phones with access to the Internet

## Sequence:

1. A number line.
2. Coordinates plate
3. Point's coordinates in the coordinates plate.
4. Points, which are said, marking.
5. Project: Drawings in the coordinates palte.

## Web tools:

Microsoft Office PowerPoint 2007
https://www.liveworksheets.com

Learning
Apps.org
https://learningapps.org

## GeaGebra

https://www.geogebra.org/

## A number line


2. Practice:

1. Complete the task: https://learningapps.org/19527874
2. Complete the task: https://learningapps.org/19528791
3. Practice:

Complete the task: https://www.geogebra.org/classic/byg3bu6q
4. Homework:

Complete the crossword: https://learningapps.org/19529432

| \% | Smart School for Smart Age |  |  |
| :---: | :---: | :---: | :---: |
|  | 2 lesson |  |  |
|  | Coordinates plate |  |  |

1 Learn:
How to draw a coordinates plate.
Write marked ponts‘ coordinates.

2. Practice:
https://www.liveworksheets.com/qe741419yh
3. Homework:

Complete the crossword: https://learningapps.org/19533868

|  | Erasmus+ <br> Smart School for Smart Age <br> 3 lesson <br> Point marking in coordinates plate |
| :---: | :---: |
| 1. | Learn: <br> Learn to mark the point when we know its coordinates. <br> The task: <br> Mark the point A in coordinates plate: A (-2; $-3,5$ ) <br> 1. Mark the $\mathrm{Ox}-2$ <br> 2. Mark the $\mathrm{Oy}-3,5$ <br> 3. Draw the lines until they cross each other <br> 4. The drawn lines' intersection point $A$ coordinates are: -2 and 3,5 . |
| 2. | Practice: <br> Choose the point tool in the app Geogebra, mark the points in a coordinates plate: $A(5,5 ; 1) ; B(6 ;-1) ; C(2 ; 0), D(-2 ;-2,5) ; E(4,5 ;-5) ; F(0 ;-3) ; G(-2 ; 0,5)$ <br> https://www.geogebra.org/classic/dkacv69z |
| 3. | Practice: <br> Choose one line, mark some points there and one by one, join them by lines: $A(3 ; 1) ; B(1 ; 4) ; C(-1 ; 1) D(-3 ; 1)$; $\mathrm{E}(-2 ;-2), \mathrm{F}(4 ;-2), \mathrm{G}(5 ; 1)$. Finally, join the point G line with the point C . <br> https://www.geogebra.org/classic/ycjvkvff <br> The answer: https://www.geogebra.org/classic/stnamg4e |

## 4 lesson

Points drawing in coordinates plate
Project: My name's shape

1 1. Use the table below to complete the task

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| A | A | B | C | Č | D | E | E | E | F |
| G | H | I, I | Y | J | K | L | M | N | O |
| P | R | S | Š | T | UU,U | U | V | Z | Ž |

2. By using the app Geogebra, each student will create his name's shape.
e.g.

3. Students‘ works:
https://www.geogebra.org/classic/ecgu3bdv


https://www.geogebra.org/classic/wgtbuyrs


https://www.geogebra.org/classic/ve3gncgx
LAIMONAS

| Vardo reikšmés | Raides attinkančos <br> reikక̇mes |  |
| :---: | :--- | :--- |
|  | x | y |
| LA | 7 | 1 |
| Al | 1 | 3 |
| MO | 8 | 10 |
| NA | 9 | 1 |
| AS | 1 | 3 |


https://www.geogebra.org/classic/pyxqghxb

https://www.geogebra.org/classic/wpcjjs6s


5 lesson
Point drawing in coordinates plate
Project: Drawings with Geogebra

## Project:

Draw an animal using app Geogebra:

1. „Arklys"
https://www.geogebra.org/m/sez83eme

2. https://www.geogebra.org/classic/eqevtg36

3. https://www.geogebra.org/classic/hyqyxhcs

4. https://www.geogebra.org/classic/bf6hbhp7

| 7 | -7 | -7 | -6,5 | -6 | -5 | -3,5 | -5 | -4,5 | -3 | -1,5 | 1,5 | 3 | 4,5 | 5 | 3,5 | 5 | 6 | 6,5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 5 | 6 | 7,5 | 8,5 | 9,5 | 10,5 | 13 | 13 | 11 | 11,5 | 11,5 | 11 | 13 | 13 | 10,5 | 9,5 | 8,5 | 7,8 |



