



**Funded by
the European Union**

Erasmus+ Project “Developing Selected Key Competences of Students in School and Extracurricular Activities” NO: 2024-1-PL01-KA220-SCH-000247484/2

DEMONSTRATION LESSON PLAN IMPLEMENTED AS PART OF THE ERASMUS+ PROJECT

PROJECT SUBJECT: Mathematics

CLASS: 3rd Grade

DURATION: 45 minutes

TEACHER: Bożena Geglis

SCHOOL NAME: Riešė St Faustina Kovalska Basic School of Vilnius Region

LESSON TOPIC: In the Enchanted Forest: Calculating the Area and Perimeter of Rectangles and Squares- Revision

EDUCATIONAL OBJECTIVES – GENERAL REQUIREMENTS (CORE CURRICULUM):

- Developing the ability to measure side lengths of geometric figures
- Shaping the ability to calculate perimeter and area of rectangles and squares
- Stimulating pupils' creative activity
- Fostering responsibility for group work
- Developing a research attitude, curiosity about the world, and independence in problem-solving

TEACHING CONTENT – SPECIFIC REQUIREMENTS (CORE CURRICULUM):

The topic is compliant with the current core curriculum and teaching programme. The core curriculum states: the pupil "measures the perimeter of rectangles and squares using measuring tools, including real-life contexts, and calculates the perimeter and area of rectangles (including squares) with given side lengths."

- The pupil can measure the sides of rectangles and squares using a ruler.
- The pupil can calculate the perimeter and area of squares and rectangles.

KEY COMPETENCES DEVELOPED DURING THE LESSON:

- During the lesson, pupils will develop initiative by constructing their own ideas in poster creation.

- Through solving tasks, they will also develop mathematical competences and learning to learn skills.
- Group work will foster the development of social competences and communication skills.

TEACHING METHODS:

- Problem-solving method
- Working with worksheets
- Individual work
- Group work

TEACHING AIDS:

- Worksheet – crossword, word scramble
- Various types of measuring tools
- Worksheet – calculating perimeter and area
- Interactive exercises

LESSON STRUCTURE

- 1. INTRODUCTION (7 min.)**
 - Dividing pupils into groups, drawing names of trees
 - Introducing the lesson topic: solving a crossword in groups
 - Explaining the group assessment criteria
- 2. MAIN PART (25 min.)**
 - Review of concepts: area and perimeter
 - Educational presentation via Canva
 - Genially activity: collecting crystals in the enchanted forest
 - Completing worksheets: group work.
 - Word scramble: creating slogans about appropriate behaviour in the forest.
- 3. SUMMARY AND EVALUATION (13 min.):**
 - Presentation of pupils' created portraits- trees with leaves. Measuring perimeters and stating dimensions for the forest fairy.
 - Group work evaluation using:
<https://classroomscreen.com/app/screen/w/5aac5bdf-1562-4996-b4c8-afcd4d8882a7/g/e32199fc-d873-4286-abe2-eeafce01ab52/s/1c7bee2f-50ae-4923-a1c4-ffe89b3f5e58>

BIBLIOGRAPHY:

1. https://matzoo.pl/klasa4/obwod-prostokata_24_151
2. https://matzoo.pl/klasa4/pole-prostokata_24_154#google_vignette

3. Anna Juryta, Anna Szczepaniak, Sławomir Wójcik „Mały matematyk. Zadania i łamigłówki”
4. Kristin Dahl, Mati Lepp „Matematyka ze sznurka i guzika”
5. Alfred S. Posamentier, Robert Geretschlager, Charles Li, Christian Spreitzer „Matematyka jakiej nie znacie. Praca zbiorowa”
<http://www.matematyka.wroc.pl/book/strony-nauczycieli>
6. <https://www.ore.edu.pl/2018/02/materialy-dla-nauczycieli-szkol-cwiczen-matematyka/>

OPINION BY THE METHODOLOGY TEACHER:

The demonstration lesson plan has been prepared in accordance with the requirements of the core curriculum and the objectives of the Erasmus+ project. The topic is appropriate for the third-grade level and combines mathematics instruction with active learning methods that develop key competences.

The chosen methods (problem-solving, group work, individual work, worksheets, and interactive activities) promote pupil engagement, support the development of mathematical skills, logical thinking, teamwork, and creativity.

An important asset of the lesson is the use of a narrative element (enchanted forest), making the activities more attractive and engaging for children. The use of digital tools (Genially, Canva) reflects a modern approach to education and supports the development of digital competences.

The lesson structure is well thought out and logically planned. The diversity of activities allows the content to be adapted to individual pupil needs. Guidelines for working with pupils with diverse needs are also included, reflecting the teacher's pedagogical sensitivity.

I evaluate the lesson plan positively and recommend its implementation as a valuable educational proposal.

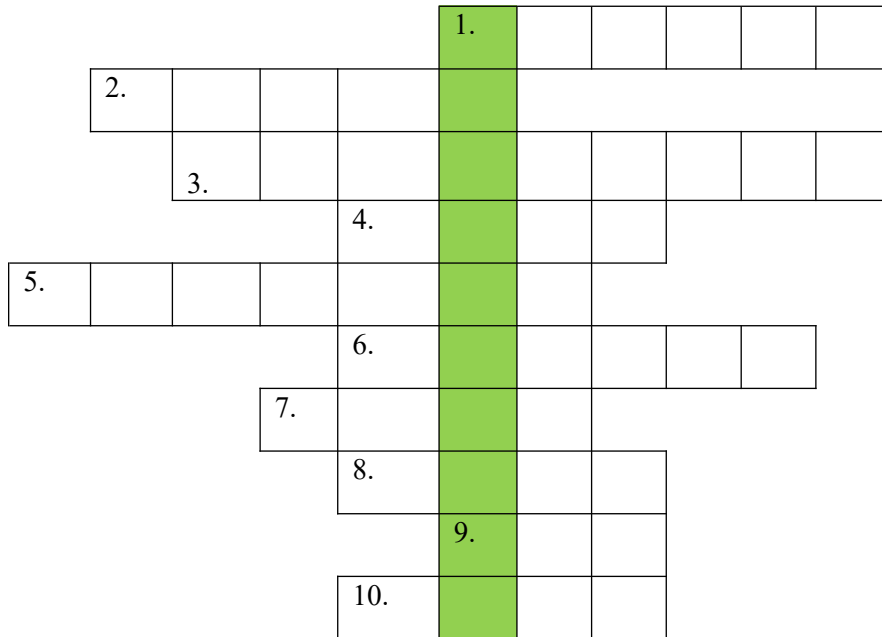
Lilija Ogint

SCHOOL HEADTEACHER'S APPROVAL:

The lesson plan has received a positive evaluation: I approve it for implementation.

APPENDIX 1

Crossword



1. Kids like me, squirrels search for me — I'm tasty inside and have a hard shell outside.
2. You'll find it hidden under a tree in the forest, it wears a cap and is often tasty and healthy.
3. have a hollow high up in a tree; I collect acorns, nuts, and pinecones.
4. One thing is certain about it — it gnaws on wood and sometimes dams a river where it builds its home.
5. What does every bird build to raise its chicks, though the cuckoo forgets about it?
6. They grow on trees and fall in autumn; when the wind blows, they turn brown.
7. I have heart-shaped leaves and fragrant yellow flowers; to make tea, you must mix them with water.
8. I'm a predator with sharp eyesight, I hunt small rodents at night, my head turns nearly all the way around, and people see me as a symbol of wisdom.
9. I have a red, bushy tail, and hens in the coop are afraid of me.
10. I make thick carpets in the forest, soft and damp after rain; I have no roots or flowers but absorb water like a sponge.

APPENDIX 2

Worksheet No. 1: The Fairy Glade

The fairy left a hint: you will find the crystal under the number where the perimeter is less than 100 meters.

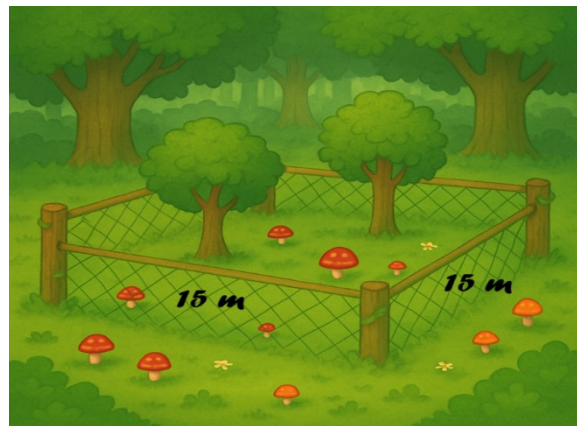
Plot No. 1

The fairy wants to fence a rectangular plot that measures 25 meters by 35 meters.

How many meters of fencing should she buy?



Plot No. 2. Calculate the perimeter of the given plot in the shape of a square.



APPENDIX 3

Worksheet No. 2. Bird Nests.

The fairy left a clue that the crystal is located in the nest where the answer is more than 300

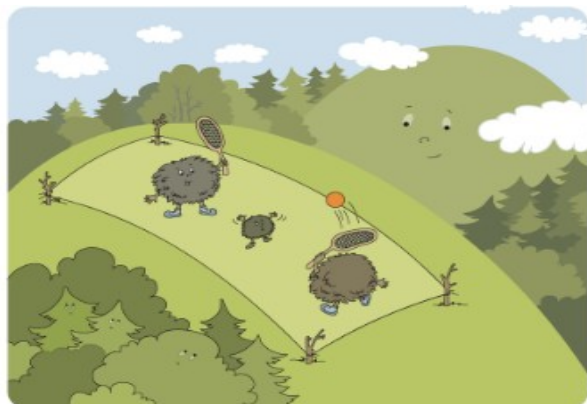
square meters.

Nest No. 1. Calculate the area of the forest clearing with the given dimensions.



15m

Nest No. 2. Calculate the area of the forest creatures' field if the length is 30 m and the width is 10 m.



APPENDIX 4

Worksheet No. 3. Troll Stones.

The fairy left a clue that the crystal can be found under the stone with the number where the result is equal to 22.

Stone No. 1. Measure the sides of the figures and calculate their area. By how much is the area of the rectangle greater than the area of the square?



Stone No. 2. Calculate the area of the gardens and compare them. By how many square metres is the gnomes' garden larger than the fairy's garden?



APPENDIX 5

BE KIND TO THE FOREST!

Park in designated areas; do not enter with a car or motorcycle.

You can take your dog with you, but keep it on a leash.

Respect the forest inhabitants- keep quiet.

Camp and light fires only in designated spots.

Keep the forest clean- take your trash with you.

Collect memories- leave the plants in the forest.