

Chapter 4

Enjoy counting the perimeter and the area of a rectangle

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Summary

A group of 15 students from classes C and D participated in an outdoor maths lesson in the school yard. The students were divided in smaller group and were asked to measure the football field , in order to give the results to a worker that would replace the fence and the plastic sod. After discussing the measurement units they had to use (meters) as well as all the calculations they needed to make (perimeter and area) they were given 20m and 50m measuring tapes and started measuring the sides of the field. They made notes on a worksheet and finally had the necessary results.

Name of the activity

Enjoy counting the perimeter and the area of α rectangle.

Introduction

This is an important activity as students have the opportunity to implement mathematics in real life and not just view them as numbers on a paper.

Learning objectives

- Make observations
- Learn about standardized measurements
- Use of measuring tape.
- Learn basic maths-geometry rules
- Enhance team work and coordination
- Promote problem solving skills

Resources

Worksheets, pencils, measuring tapes (20 and 50 meters), two colored chalks, a calculator.

Activity

Step 1:

The following problem was presented to the students as we were all in the school yard: The fence and the plastic sod of the school's football field had to be replaced and we would have to order the needed material.

Step 2

Students were divided in groups and were asked to find what they would have to measure, what instruments they would have to use and how to use their results.

Step 3:

After each team answered the previous questions correctly they were given a worksheet, that reminded them how to calculate the perimeter and the area of a rectangle. Then they were asked to measure the football field using a measuring tape.

Step 3:

The students wrote down the outcomes of the measurements and then calculated the perimeter and area of the football field.

Step 4:

Each team presented their results and mistakes were discussed .The result of the measurements were drawn with coloured chalk on the floor of each side.

Comments from the learners' surveys

The students had never seen or used a measuring tape, so they were impressed by its size. They said they liked the activity and understood why and how maths are so important in our everyday life.

Final remarks

Before starting this outdoor lesson it was really important to explain to students very well the meaning of a rectangle, perimeter, area and units of measurement. Otherwise students would be bored and consider maths as chinese! We noticed that students were more interested as usual in that lesson, especially some of them that are very reserved in the classroom. They were really concentrated in their task, they had a chance to understand what Maths means in our real life and seemed to enjoy it.

Supplementary material

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