LESSON 2

Measuring the Space (1): Length, Perimeter, Area

60 minutes (2 periods) Mathematics and Planning

WHAT THIS LESSON DOES

You will measure a real school space like a classroom or yard using a tape measure, convert measurements from cm to m, and calculate perimeter and area for a decorating project. Work in groups to record accurate results on a worksheet.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Convert between mm, cm, m and km using appropriate units.
- Calculate perimeter and area of rectangular spaces.
- Measure real spaces accurately and record to the required degree of accuracy.

BEFORE THE BELL

- Before the Lesson Print 'Space Measurements CalculationSheet' worksheets for each group (or ensure digital access). Gather 1 tape measure per group of 3-4 students. Prepare printed key concepts table for weaker students. Locate project spaces (art room, yard, stage) and check accessibility. Suggested Timing Getting Started: 5 mins What You'll Learn: 10 mins Try It Yourself: Measure Your Project Space: 25 mins Space Measurements CalculationSheet: 10 mins or set as homework Think About It: 5 mins What You Covered: 5 mins Teaching Tips Model tape measure use: demonstrate pulling tight and reading to nearest cm. Circulate during measuring activity; prompt groups to double-check conversions. Whole-class share: have 2-3 groups report perimeter before worksheet time. Emphasise showing formulae on worksheets for portfolio evidence. Common Mistakes Not pulling tape measure tight: measurements too long, solution: reteach 'straight line' and demo again. Forgetting to convert cm to m: wrong units in calculations, solution: add conversion step as checklist item. Rounding too early before final calc: inaccurate results, solution: remind 'convert first, then calculate to 2 d.p.'. Differentiation Support: pair weaker groups with a table or smaller space; provide conversion chart. Extension: calculate carpet cost at €22/m^2; add notes column for obstacles like doorways. All: verbal check before worksheet, 'Show me your perimeter formula'.

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HOW THE LESSON RUNS