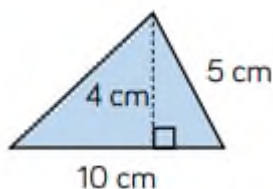




Mathematics Medium Term Plan

Year 6 Spring Term Unit 3 Perimeter, Area and

Volume



NC

Recognise that shapes with the same area can have different perimeters and vice versa.
 Recognise when it is possible to use formulae for area and volume of shapes.
 Calculate the area of parallelograms and triangles.
 Calculate, estimate and compare volume of cubes and cuboids using standard units.

Focus: Perimeter, Area and Volume

Time: 1 week

Concept Sequence

Shapes: same area – find and draw rectilinear shapes that have the same area. Use factors to draw rectangles with different areas.
 Area and Perimeter – calculate for rectilinear shapes. Use formulae – link with algebra.
 Area of a Triangle 1 – start by counting squares (approximate/estimate). Make links between area of rectangles.
 Area of Triangles 2 – use knowledge of area of rectangle to find area of right-angled triangles (half). Move to formulae.
 Area of Triangles 3 – use formulae to find area of any triangle. $\frac{1}{2} \times \text{length} \times \text{height}$.
 Area of parallelogram – link to area of rectangles. Show how parallelograms can be cut to make rectangles. Length \times perpendicular height.
Recap Y5 Volume
 Volume – count cubes (cubic units). Volume is the space occupied. Build models and describe.
 Volume of a Cuboid – link counting with formulae: $l \times w \times h$. Link to area of base \times height.

Times Tables

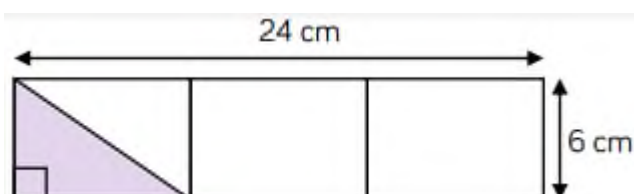
Consolidate and practice all multiplication and division facts to 12×12 – any order, missing numbers, fractions.
 Use multiplication and division facts to derive associated facts.
 Develop multiplicative reasoning - links between multiplication, division and fractions.

Vocabulary

Measure, measurement
 cm, m
 width, length, breadth
 edge, perimeter, ruler
 metre stick, tape measure
 Multiply, multiplied by
 Inverse
 Measure, measurement
 cm, m, mm, km, cm^2 , mm^2 , km^2 , m^2 , cm^3 , m^3 , mm^3
 width, length, breadth, side, base
 edge, perimeter
 area, covers
 ruler, metre stick, tape measure
 Multiply, multiplied by
 Inverse
 Names of 2D/3D shapes – regular and irregular (triangle/parallelogram/rectangle) (cube/cuboid)
 Rectilinear/Compound shape
 Volume
 Parallel, perpendicular

Planning Links

Power Maths/Maths No Problem/Aspire Maths
 White Rose Scheme of Work:
<https://assets.whiterosemaths.com/new-schemes/Year%206%20Spring%20Block%205%20SOL%20Area%20perimeter%20and%20volume.pdf>



Resources

Cubes, Shapes, squared paper
 Gordons Maths Games, Mathletics,
 TTRockstars
 BBC Super Movers
<https://www.bbc.co.uk/teach/super-movers/ks2-collection/zr4ky9g>