



## Crosby Primary School

## Mathematics Medium Term Plan Year 5 Summer Term

## Unit 6 Measure: Volume (1 Week)

### National Curriculum

- Estimate volume [for example, using 1 cm<sup>3</sup> blocks to build cuboids (including cubes)] and capacity [for example, using water]

### Ready to Progress

- 5NPV-4 Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in units of 1 with 2, 4, 5 and 10 equal parts.
- 5NPV-5 Convert between units of measure, including using common decimals and fractions.

### Times Tables

- Consolidate and practice all multiplication and division facts to 12x12 – any order, missing numbers, fractions.
- Use multiplication and division facts to derive associated facts.
- Develop multiplicative reasoning - links between multiplication, division and fractions

### Ready to Progress

- 5NF-1 Secure fluency in multiplication table facts, and corresponding division facts, through continued practice.



3,600 cm<sup>3</sup>



1,000 cm<sup>3</sup>



187,500 cm<sup>3</sup>

### Concept Sequence

- Cubic centimetres - Volume is the amount of space a solid takes up. Introduce cm<sup>3</sup>. Make solid shapes using cm cubes. Look at conservation (different shapes, same volume).
- Compare Volume – build shapes and compare directly.
- Estimate Volume – check by building.
- Estimate Capacity – Note difference between volume and capacity. Capacity is the amount a container can hold. Use l and ml. Use practical equipment such as water/rice.

What is the most appropriate capacity of a large bottle of fizzy drink?



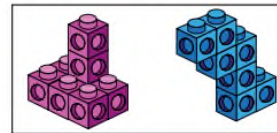
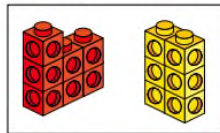
20 ml

200 ml

2 litres

20 litres

In each pair, which shape has the greater volume?



### Vocabulary

Width, height, length, cm  
Volume, cubed, cm cubed  
Capacity  
Litres, millilitres,  
centimetre  
Names of 3D shapes



### Planning Links

White Rose Scheme of Work:

<https://assets.whiterosemaths.com/new-schemes/Year%205%20Summer%20Block%206%20OSOL%20Volume.pdf>

Power Maths, White Rose, Maths No Problem, Aspire Maths

### Resources

Cubes, containers, water, rice  
Gordons Maths Games, Mathletics, TTRockstars  
BBC Super Movers

<https://www.bbc.co.uk/teach/supermovers/ks2-collection/zr4ky9g>

Compare the capacity and the volume. Use the sentence stems to help you.



Container \_\_\_ has a capacity of \_\_\_ ml  
The volume of water in container \_\_\_ is \_\_\_ cm<sup>3</sup>

