

Maths Challenges Summer Term 2019-2020

Week 9

Focus	Challenge 1	Challenge 2	Challenge 3
<p>Measure (capacity/volume) and real life problems</p>	<ul style="list-style-type: none"> • Recap on the purpose of different measuring equipment. What do we measure using weighing scales, jugs, rulers/tapes? What units are needed for each? • Explore how many 'cups' of water will fill different containers in your house • Find 3 food containers and put them in order of their written capacity from smallest to largest (eg 35ml, 100ml, 500ml) • Use the scale on a measuring jug to measure multiples of 100ml (<i>If scales are hard to read, use a felt tip to mark 'x100ml or add food colouring/juice</i>) • Count in multiples of 100ml to 1000ml/1L and beyond (eg 1L 100ml IL 200ml...) • Investigate different ways of making up 1000ml (eg 300ml + 700ml) • Combine given totals-eg what is 100ml and 200ml altogether? Record this as a calculation 	<ul style="list-style-type: none"> • Look at labels from different bottles/cartons and identify and record the capacity in ml /L (<i>Ice-cream & toothpaste also use these units</i>) • Compare the capacity of 2 items (eg a canned drink and a carton of milk). Calculate the 'difference' (by subtracting smallest from largest figure using a calculator) • Combine given totals-eg what is 750ml and 250ml altogether? Record this as a calculation • Recall facts about capacity, ie 1000ml=1L/ 500ml=0.5L • Count in multiples of 100ml to 2000ml/ 2L and beyond (eg 2.1L, 2.2L...) • Ask a family member to hide the written capacity on 3 bottles or cartons. Can you estimate which holds most/least? How many ml do you think each holds? Check the actual capacity using a measuring jug and then calculate the 'difference' 	<ul style="list-style-type: none"> • Fill a range of empty bottles or cartons with water and then work out their capacity using a measuring jug. Accurately record as decimal totals (eg 1500ml =1.5L/ 150ml=0.15L) • Combine the totals of different containers and record as a calculation (eg 1.5L +200ml+ 0.3L=2L) • Recall facts about capacity, ie 250ml=0.25L, 100ml=0.1L • Count forward and back in different multiples, starting at any given point (eg 105.5L, 105.75L, 106.0L...) • Ask family members to estimate the capacity of 5 (or more) containers found in your home and then measure accurately using the scale on a jug. Work out which estimate is closest • Use a conversion table/on-line app to convert imperial and metric measures (eg 1pint=568ml)