

Ongoing across the week - Mental Maths

Count together in 10s forwards and back. Repeat with 2s (last week) & 5s. Look at the patterns for each - what do we know about the numbers? - what do 5s and 10s have the same and what's different - why?

Drop 5ps into a pot and call out the total amount. Repeat with 10ps and 2ps. See if you can start with a total and drop coins away - can they count backwards to see what's left?



Try some quick fire multiplication questions e.g.  $5 \times 2$ ,  $6 \times 10$ ,  $3 \times 5$ ,  $7 \times 2$  etc. Reinforce using fingers to count in 2s, 5s, 10s (so each finger represents 2, 5 or 10 rather than 1) it's important that children chant the pattern so they use their fingers efficiently too. You could use the finger counter to support this <http://www.ictgames.com/mobilePage/fingerCount/index.html>



Discuss to reinforce that when you divide something into 2 parts this is the same as halving the whole amount, which is the opposite of doubling. Then practise dividing/sharing even numbers between 2 to illustrate and support this.

Useful tips and tools to support activities this week

Multiplication and division quick fire games <https://www.topmarks.co.uk/maths-games/hit-the-button>



BBC Bitesize have a great collection of clips, songs and games to support the activities this week too



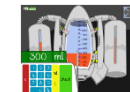
Missing Wimbledon this year? Play Tables Tennis instead! <https://www.ictgames.com/tablesTennis/mobile/>



Doggy Division Dinners <http://www.ictgames.com/mobilePage/doggyDivision/index.html>



Reading scales - Capacity Countdown <http://www.ictgames.com/mobilePage/capacity/index.html>



**Education City** - use the homework tab to access your child's own homework city where specific activities for this week have been enabled - there are also lots of Pick and Play maths activities to choose from too. <https://go.educationcity.com/>

Vocabulary this week - lots of, sets of, groups of, times, array, multiply, divide(d) by, shared between, measure, standard measure, non-standard measure, litres, millilitres

**Activity 1**






**Multiplication 5x & 10x table** Watch this clip to support this activity <https://www.bbc.co.uk/teach/class-clips-video/maths-ks1--ks2-how-to-use-arrays-to-multiply/zrks382>  
Create groups of 5 objects and ask how many groups are there? How many things are in each group? It's important that children understand all the vocabulary related to multiplication so they understand how to solve a question or calculation. Use also the word sets of, rows of.  
Move some of the objects from their groups into rows to make an array. Revise the fact that an array can be turned or we can look down and make groups going down (columns) rather than across (rows), showing that  $3 \times 5$  is equal to  $5 \times 3$ , both make 15.  
Also look at groups of 10 in the same way, making groups, putting the objects into rows to make arrays and then turning the array around to look at how the total amount doesn't change (eg  $4 \times 10$  is the same as  $10 \times 4$ )  
Now solve a mixture of 5x and 10x calculations (See resources - Activity 1 Sheets Jungle Race 5s and 10s, games to play and complete). When working out try using ten rods for 10s (like dienes), rather than drawing lots of spots. 5s could be worked through using the dice pattern. Remember to discuss efficiency, counting in 1s is very longwinded - using our knowledge of 5s and 10s is much quicker, and links our learning together. If this is tricky, keep practising making groups (lots of groups) of 5 or 10, counting carefully in ones, then relooking at the group of 5 or 10 as a whole and counting in that number across the groups. This will also highlight how long it takes when counting in ones.

**Activity 2**



**Multiplication mixed - 2s, 5s, 10s** Quickly recap yesterday's learning and go through any errors/ misconceptions from yesterday.  
Begin by chanting in 2s 5s and 10s using fingers (or singing and watching songs on bitesize - see useful tools above). Pose a real life multiplication problem to solve e.g. Jill bought 6 packets of pencils. There were 5 pencils in each packet. How many pencils did she have altogether?  
Model solving the problem by recapping the need to look for the important information in the problem and underline or highlight it. Encourage your child to use resources and draw pictures to help them to solve it. They need to write out the calculation too (either as repeated addition )  $5+5+5+5+5 = 30$ , and if they can, as a multiplication sentence  $6 \times 5 = 30$   
Continue to work through a selection of real life problems (see resource Activity 2 Multiplication word problems) or create your own.

<p><b>Activity 3</b></p> 	<p><b>Division.</b> Begin by watching this clip together <a href="https://www.bbc.co.uk/teach/class-clips-video/maths-ks1--ks2-the-relationship-between-multiplication-and-division/zdqb47h">https://www.bbc.co.uk/teach/class-clips-video/maths-ks1--ks2-the-relationship-between-multiplication-and-division/zdqb47h</a> (you may need to pause it every now and then to recap what's happening and check your child is following it)</p> <p>Then spend some time practising sharing objects (the total amount) into groups. Share 15 sweets between 5 people, how many will they get each? Once done, and they see the answer is 3, show how this is related to multiplication because we can see that 3 groups of 5 is 15, but with division we are given the total 15, and are looking at how to share it out. Do this lots of times using resources and drawing pictures (working on numbers divisible by 10, 5 and 2 to enable them to see the link between multiplication division more easily). Keep referring to how division or dividing is the opposite (inverse) to multiplication because with dividing we have the total number of objects, but we are usually asked to share the amount out fairly (equally) or to divide it up into equal groups and to see how many are in each group or how many groups we have. (see resource - <a href="#">Activity 3 Practical Sharing</a>)</p> <p>If ready, introduce the division sign to record (this has been covered before in Y1, but may need recapping). Model how to write the number sentence that matches a practical problem they have just solved. Please note however, it is more important that they understand the questions and practise solving them practically, before moving onto abstract calculations (these are written number sentences).</p>
<p><b>Activity 4</b></p> 	<p><b>Division</b> Continue from yesterday, taking time to repeat strategies and going through any misconceptions or aspects that your child may have found tricky to follow. Watch <a href="https://www.bbc.co.uk/teach/class-clips-video/maths-ks1--ks2-how-to-use-mental-methods-to-divide/zvg6nrd">https://www.bbc.co.uk/teach/class-clips-video/maths-ks1--ks2-how-to-use-mental-methods-to-divide/zvg6nrd</a> to reinforce learning.</p> <p>Today, take a look at some real life division problems to solve practically using resources and drawing pictures. As before, encourage your child to underline/highlight the important information within the word problem (see Activity 4 Division Word problems) and to work practically to solve the problem, drawing pictures too will help them to record their workings out. If appropriate, support your child to record their problem solving as a number sentence using the division sign.</p> <p>Next, and only if your child shows you that they're ready, take a look at some written division calculations using the division symbol. Model reading the sentence aloud, eg <math>8 \div 2</math> "What is eight cakes shared between 2 people?" using the sharing method. If appropriate, give your child a few written division calculations to solve practically (and using drawing pictures) then to complete the number sentence by filling in their answer (see resource - <a href="#">Activity 4 Division word problems</a>)</p>
<p><b>Measure Activities</b></p> 	<p>First, watch <a href="https://www.bbc.co.uk/bitesize/topics/zt9k7ty/articles/zp8crdm">https://www.bbc.co.uk/bitesize/topics/zt9k7ty/articles/zp8crdm</a> then spend time using a variety of containers filled to varying levels with liquid to <b>discuss the capacity</b> of each vessel. Which holds more/less? How do you know etc... (it's interesting to use tall, thin containers and compare to shorter, wider ones). Look at what could be used to measure (eg, any cup/beaker/egg cup/container etc... these are non standard units of measure. Then look at a measuring jug/bowl and the scale on the side - look at ml and L - these are standard measures and are used around the world. Discuss where these measures might be used (recipes/food labelling/garages etc..). Can they find items in the home/out and about that have these measures written on them? <b>Look through the powerpoint resource (Measuring in ml)</b></p> <p>Take time to explore the scale and its marks, discussing what each line represents, and filling the containers to specified amounts, estimate how many ml or L each vessel may hold. Include number problems in your activities - eg. This bucket holds 10L, this is a 2L bottle, how many full bottles will it take to fill the bucket? Count on to find the difference between measures, how many more litres/cupfuls? Adding different amounts, which two jugs contain 5 litres? (use of bonds). If a bucket held 10 litres and we poured out 7 litres, how many litres are left? Or if 3 litres are left, how much was poured out? Etc. <b>Look through the quiz powerpoint resource (Capacity Quiz)</b></p> <p><b>If you have time - follow a simple recipe, or make a fun mocktail - using standard measures and reading scales.</b></p>
<p><b>Homework</b></p>	<p>By the end of the week - send <b>just one</b> completed activity sheet to your class teacher (if possible showing your child using the resources they chose to solve the problems).</p> <p><b>Dragonflies</b> - <a href="mailto:P.Glass@heatherside-inf.hants.sch.uk">P.Glass@heatherside-inf.hants.sch.uk</a> <b>Swans</b> - <a href="mailto:S.Williams@heatherside-inf.hants.sch.uk">S.Williams@heatherside-inf.hants.sch.uk</a> <b>Kingfishers</b> - <a href="mailto:E.Brown@heatherside-inf.hants.sch.uk">E.Brown@heatherside-inf.hants.sch.uk</a>  <b>Lions</b> - <a href="mailto:A.Fergus-Smith@heatherside-inf.hants.sch.uk">A.Fergus-Smith@heatherside-inf.hants.sch.uk</a> <b>Tigers</b> - <a href="mailto:V.Hogan@heatherside-inf.hants.sch.uk">V.Hogan@heatherside-inf.hants.sch.uk</a></p>