

### Subtraction activities

This week's maths will focus around ensuring fluency with subtraction. This is always much harder than addition and relies heavily on children understanding that addition and subtraction are opposites e.g.  $10 - 3$  can be solved quickly by knowing that  $3+7=10$ . This is why the hexabonds game this week is really helpful to support fluency when recalling number facts

#### Efficient calculation methods

In school, before the lockdown, we were thinking about the best way to calculate. Often we can get to the right answer but it may not be the most efficient method. This week we will focus on a couple of calculation methods that are more efficient than just counting in 1s on your fingers or in your head. Ultimately we want to get a point where you child can solve the subtraction because they know the related addition e.g.  $12-5=7$  because  $5+7=12$ .

#### Method 1 – Bridging back to the previous multiple of 10 (Year 1 and Year 2)

This means subtracting to the multiple of 10 before and then on from there e.g. Below we partition (or split) the 5 into 2 and 3 because we want to subtract back to 10 first and then subtract the leftovers from 10.

$$\begin{array}{c} \text{e.g. } 12 - 5 = \\ \swarrow \quad \searrow \\ 12 - 2 = 10 - 3 = 7 \end{array}$$

Year 1 practice – Bridge only back through 10 e.g.  $17-9$ ,  $12-4$ ,  $14-8$

Year 2 practice – Bridge back through any multiple of 10 e.g.  $22-5$ ,  $56-9$ ,  $74-8$

#### Method 2 – Using small facts to help us with larger facts (Year 1 and Year 2)

e.g.  $16 - 3 =$  We know  $6 - 3 = 3$  so we are just need to add the 10 back afterwards.

Year 1 practice – Work within 20 e.g.  $15-2$ ,  $17-4$ ,  $19-6$

Year 2 practice – Work within 100 e.g.  $67-6$ ,  $99-7$ ,  $45-4$

#### Method 3 – Subtracting 9 by subtracting 10 and adding 1 (Year 2 only)

This is a much quicker method than counting back in 1s. Simply subtract 10 and then add 1. This is often best represented on a 100 square where the children can see the pattern of this and visualise numbers better. They might initially count back in 1s but once they see the pattern emerging, you can encourage them to predict and then to subtract 10 and add 1. You could use <https://www.primarygames.co.uk/pg2/splat/splatsq100.html>

$$\text{e.g. } 24 - 9 = \quad 38 - 9 =$$

11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	3	36	37	38	39	40

$$24 - 10 = 14 \text{ (Remember which digit is the 10s and then it's easy to subtract 10 from a number)}$$

$$14 + 1 = 15 \text{ (Remember which digit is the 1s and then it's easy to add 1)}$$

Once you have tried out each of these methods, ask a grown up to write a mixture of subtraction calculations and you should decide which strategy would be the best one to use for each and why.