

# Y6 - Addition and Subtraction

By the end of Year 6, children must be able to add and subtract both whole numbers (using increasingly larger numbers) as well as decimal numbers (including those with different numbers of decimal places). They must be able to employ the formal written columnar addition and subtraction methods for larger, more difficult calculations or draw upon secure mental strategies to add/subtract smaller numbers together quickly in their heads (e.g.  $39 + 21 + 11$ ). However, so that children can use these methods quickly and efficiently, a secure knowledge of number facts (e.g. knowing that  $13 - 6 = 7$ ) is required. Please see our school calculation policy for more information about this.

## Activities & Games!

- ★ Complete the addition and subtraction calculations found in the Year 6 home learning section of the website. Then use a calculator to check your answers. You can look at the school calculation policy to help you with the column addition and subtraction methods if you need to.
- ★★ Create a Mental Maths paper for your class. You need to set the questions just like the ones we do in school. Your first 5 questions should be answered in 5 seconds so try to make these slightly easier, for example: add 39, 21 and 11. The next 5 questions should be answered in 10 seconds so these can be a bit harder, e.g. a pizza costs £1.50, how much do 4 pizzas cost? The last 5 questions should be answered in 15 seconds and so these can be quite difficult, e.g.  $53.24 \times 1000$ . Try and include questions that cover a variety of maths topics. Make sure you have the answers ready!
- ★★ You will need a set of dominoes for this activity, or alternatively print off the set we have saved for you on the website. Can you arrange the dominoes in a 7 by 4 rectangle so that the spots in each column add up to 24, while the spots in every row total 42.
- ★★ Choose digits to go in the empty boxes to make these number sentences true:  
 $14781 - 6 \square 53 = 8528$        $23 \cdot 12 + 22 \cdot \square = 45 \cdot 23$   
Can you find an adult to create you some more missing number sentences?
- ★★★ Can you use five of the digits 1 to 9 to make this number sentence true?  $\square \square \cdot \square + \square \cdot \square = 31 \cdot 7$
- ★ Ben has five coins in his pocket. How much money might he have?
- ★ Pick two two-digit numbers. Find the sum of the numbers. Find the difference between the numbers. Can you find other numbers with the same sum and difference?

# Going deeper...

Each letter of the following sum represents a different digit (any repeating letters represent the same number). See if you can work out what the sum is:

$$\begin{array}{r} F O O T \\ + B A L L \\ \hline G A M E \end{array}$$

Now try this one:

$$\begin{array}{r} J M C \\ + J M O \\ \hline S U M S \end{array}$$

[Subtraction grids](#)

[Guess My Number](#)

[Broken Calculator](#)

[Magic Squares](#)

[Addition Pyramids](#)

**Wonderful websites**

Whilst it can be very tempting to encourage your child to have a go at the more challenging activities, it is far better to work with them at a level they feel confident with. Significant and regular practise of even the most basic skills outlined in this document will lead to a much deeper understanding and greater proficiency, and ultimately a much more pleasant 'homework' experience for you and your child!