

Tips for Maths at home – Years 3-6

- Talk positively about maths with your child – even if you struggled with it at school yourself. Staying positive about maths will help your child. Saying "I was bad at maths" can lower a child's own expectations of themselves at maths and can give your child an excuse not to try.
- Help your child see how you use maths in everyday life. For example, explore how you use fractions in cooking; percentages while shopping; distance in driving; keeping score in sports games and telling the time.
- Help your child to see the real-life purpose for the maths they are learning at school e.g. when your child is learning fractions you could ask them: – "How many slices will I need to cut the pizza into so that everyone has two slices?" – "What fraction of the glass is filled with water?" – "Can you cut up the apple to make six equal pieces?"
- Play games with cards, dominoes or dice to help your child with maths. Try asking your child to tell you the number of dots on the dice each time they are thrown during a board game. Eventually they will be able to do 'see' the number without having to count the dots.
- When you are helping your child with their maths homework and they get stuck, try to help your child solve the problem themselves by asking: – "What is the problem asking you to do?" – "How do you think we can work this out?" – "Do you think you will need to use addition or subtraction, or do you need to use multiplication or division?"
- Ask your child to explain how they work things out – e.g. "What is the question asking you to do?" and "How did you get that answer?"

- With maths problems there is always more than one way to get the right answer. When your child thinks about how they figured out a problem, it can help concepts make more sense to them and build their confidence.
- Encourage your child to practise the times tables and 'mental computation' skills – working out answers to arithmetic questions in their head. Give your child little problems to solve in their head. Try asking them to: – estimate the total cost of a small basket of groceries before reaching the checkout – work out the actual cost of discounted items (e.g. 25% off \$20) – figure out when you will arrive at a destination (e.g. "It is 4:15 pm now. It will take us 30 minutes to get home – what time will we arrive?").
- Talk with your child about how they feel about maths. They may not always be willing to discuss problems they're having, but it is important to show your support and that you are interested in what they are learning.
- If your child is having difficulties with maths, speak to your child's teacher or write them an email or short note. Once problems are identified, learning patterns can be better understood and a solution can be developed.
- If you are finding it difficult to explain how to solve a maths homework problem, ask your child's teacher for advice and examples. Teachers understand that maths problems are sometimes taught differently from when you were at school. Some schools offer maths information sessions for parents.
- Encourage them to practise, practise, practise! Maths is a learned skill that improves with practise. Encourage your child to get their hands on as much practise material as possible – and do it as part of a regular routine.

When adding large numbers in our heads, it can be easier to split one of the numbers into parts and add each part separately.

$$57 + 46 \begin{cases} 40 \\ 6 \end{cases} \rightarrow 57 + 40 = 97 \rightarrow 97 + 6 = 103$$

Split Strategy

The split strategy is where we make the subtraction easy by splitting the second number into tens and ones. We then subtract each part separately.

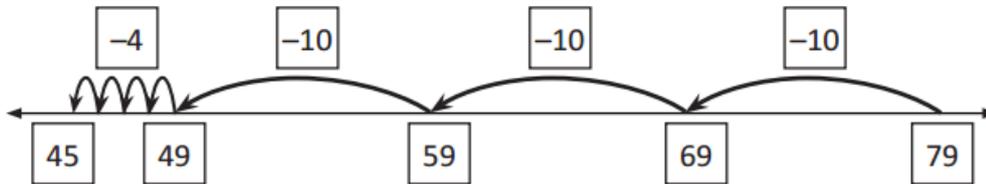
$$68 - 22 \begin{cases} 20 \\ 2 \end{cases} \rightarrow 68 - 20 = 48 \rightarrow 48 - 2 = 46$$

The jump strategy is when you use a number line to jump in tens and then units.



Jump Strategy

The jump strategy is when you use a number line to jump in tens and then units. Look at $79 - 34$. First we jump back in tens and then units. So, $79 - 34 = 45$.



Sometimes we round one number in the problem to make it easier to do in our heads. Then we adjust our answer to compensate:

$$\begin{aligned} 23 + 19 &= 42 \\ 23 + 20 &\overset{-1}{\text{---}} \quad \text{I rounded up by 1,} \\ 43 &\overset{-1}{\text{---}} = 42 \quad \text{so I subtract 1.} \end{aligned}$$

Compensation Strategy

Sometimes we round one number in the problem to make it easier to do in our heads. Then we adjust our answer to compensate:

$$\begin{aligned} 125 - 49 &= 76 \\ 125 - 50 &\overset{+1}{\text{---}} \quad \text{I rounded up by 1, which} \\ 75 &\overset{+1}{\text{---}} = 76 \quad \text{means I subtracted 1 extra} \\ & \quad \text{so we need to add 1 back.} \end{aligned}$$

I took off 1 extra so I have to add 1 back.



THINK