

Maths Task

Below the Top Tips are 3 separate tasks:

- Task 1 focuses on the fluency of addition and subtraction using the formal written methods (column addition and column subtraction). Remember to set your calculations out clearly and use the inverse to check.
- Task 2 focuses on problem solving. Use the key information in the questions to identify what operation (subtraction or addition) you need to use to calculate the answer.
- Task 3 focuses on reasoning. When answering these questions, you will need to explain and justify your answer using workings out and examples to support you.

Please use a calculator at the end of each task to check your calculations. Remember if you get one wrong, try it again in a green pen.

Top Tips:

<p>Column Addition</p> <p>Start with the ones column Add the numbers in the ones column. If the answer is 10 or above partition and <u>give</u> to the next number. Work your way along all columns using the same method. (see example)</p> $\begin{array}{r} 58723 \\ + 37514 \\ \hline 96237 \\ \hline 1-1 \end{array}$	<p>Addition</p> <p>Add Addition Total Plus Sum of Combined</p>	<p>Subtraction</p> <p>Minus Take away Reduced Difference Subtract Subtraction</p>	<p>Column Subtraction</p> <p>Start with the ones column. Subtract the numbers in the ones column. If the top number is smaller than the bottom number you need to borrow from the next column. (see example)</p> $\begin{array}{r} 8948 \\ -263 \\ \hline 685 \end{array}$ <p><i>More on the floor, borrow from next door, more on the top, go don't stop!</i></p>
<p>Here are some examples of questions to challenge your child further:</p> $\underline{\hspace{2cm}} + 126,352 = 543,156$ $345,234 - \underline{\hspace{2cm}} = 254,098$ $\begin{array}{r} 324 \square 12 \\ + 12 \square 124 \\ \hline 446736 \end{array}$ <p>Samantha has 438,670 DVDs in her collection. Tara has 234,548. How many DVDs do they have in total?</p>			

Task 1 – Fluency

- Work out this missing numbers:

$$\boxed{} - 92 = 145$$

$$740 + \boxed{} = 1,039$$

$$\boxed{} = 580 - 401$$

- Peter bought boxes of crisps when they were on offer. After 12 weeks, his family had eaten 513 packets and there were 714 left.

How many did he buy?

- Children follow a series of instructions to find a mystery number.

Eg

Start with 100

Add 5,000

Take away 400

Add 20

Subtract 750

What number have you got?

- Calculate $1,434 + 2,517$ using place value counters. The first number has been partitioned for you.



Can you solve $4,023 - 2,918$ using place value counters?

Make the bigger number and take the smaller number away.

- Julie has 1,578 stamps. Heidi has 2,456 stamps. How many stamps do they have altogether? Show how you can check your answer using the inverse.
- Adam earns £37,566 pounds a year. Sarah earns £22,819 a year. How much do they earn altogether? They have to pay £7,887 income tax per year. How much are they left with after this is taken off?

- A car showroom reduces the price of a car from £18,750 to £14,999. By how much was the price of the car reduced? Circle the most sensible answer

£3,249

£4,001

£3,751

- A games console costs £245. Mike pays for this in 5 equal payments. To the nearest ten pounds, how much does he pay per payment?
- A coach holds 78 people. 960 fans are going to a gig on the coaches. How many coaches are needed to transport the fans?

Task 2 – Problem Solving

- Rachel has £10
She spends £6.49 at the shop.
Would you use columnar subtraction to work out the answer?
Explain why.

- True or False?
Are these number sentences true or false?

$$8.7 + 0.4 = 8.11$$

$$6.1 - 0.9 = 5.2$$

Give your reasons.

- Which of the following questions are easy and which ones are hard?

$$213,323 - 10 =$$

$$512,893 + 300 =$$

$$819,354 - 200 =$$

$$319,954 + 100 =$$

Explain why you think the hard questions are hard.

- There are mistakes in the following calculations.

$$\begin{array}{r} 2451 \\ +562 \\ \hline 8071 \end{array} \qquad \begin{array}{r} 782 \\ -435 \\ \hline 353 \end{array}$$

Explain the mistake and then make a correction to find the correct answer.

- Here is an addition sentence with whole numbers and digits missing.

$$\square + 3,475 = 6\square24$$

What numbers could go in the boxes?
How many different answers are there?
Convince me.

- A five digit number and a four digit number have a difference of 4,365
Give me three possible pairs of numbers.

- Which of these number sentences have an answer that is between 0.6 and 0.7?

$$11.48 - 10.86 =$$

$$53.3 - 52.75 =$$

- Always, sometimes, never
When you add up four even numbers, the answer is divisible by four.
- Martin is measuring his room for a new carpet.
It has a width of 2.3m and a length of 5.1m.
He rounds his measurements to the nearest metre.
Will he have the right amount of carpet?
Explain your reasoning.

Task 3 - Reasoning

- If 2,541 is the answer, what's the question?
 - Can you create three addition calculations?
 - Can you create three subtraction calculations?
 - Did you use a strategy?
- Using 0-9 dice roll 3 at the same time to create a number. Your partner needs to do the same. Who can add them together correctly first? Who can subtract the smallest from the largest correctly first? Use a calculator to check.
- Kangchenjunga is the third highest mountain in the world at 28,169 feet above sea level. Lhotse is the fourth highest at 27,960 feet above sea level. Find the difference in heights mentally.

- Find the missing numbers in these calculations.

$$\begin{array}{r} 34\boxed{}1\boxed{} \\ - \quad \boxed{}482 \\ \hline 292\boxed{}4 \end{array}$$

$$\begin{array}{r} 6\boxed{}02\boxed{} \\ + \quad 5\boxed{}51 \\ \hline \boxed{}9180 \end{array}$$

- My answer is 5,398. What's the question? Create 3 addition calculations. Create 3 subtraction questions. Did you use a strategy? Explain it.

- True or false.
 $4,999 - 1,999 = 5,000 - 2,000$
Explain how you know using a written method.
- There are 1,231 people on an aeroplane. 378 people have not ordered an inflight meal. How many people have ordered the inflight meal? Give your answer to the nearest hundred.

The inflight meal costs £1.99 per person.
The cabin crew have collected £1100 pounds so far.
How much more money do they need to collect?
Round your answer to the nearest pound.



