

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.

Task 1 – Fluency

- Which is greater?
Seventy six thousand, eight hundred and twenty six or 78626
- Write the following number in words: 23650118
- Put a number in the missing space below to make the sentence correct.
 $4_236460 > 46236460$
- Work out the missing number:
 $3210 + 2564 = 9836 - \underline{\hspace{2cm}}$
 $2678 + \underline{\hspace{2cm}} = 9305 - 3789$
- The council planted 1500 new flowers on Monday. On Tuesday they doubled what they had planted the day before and on Wednesday they planted half of what they planted on Monday. How many flowers were planted altogether?
- 7208 females attended a concert as well as 8963 males. There were originally 20000 seats on sale. How many empty seats were there at the concert?
- Work out 3678×23
- Abby planted 573 bulbs. The packet showed each flower should have 13 petals. How many petals should there be altogether?
- What is the missing number below? Explain how you know.
 $80 \times \underline{\hspace{2cm}} = 560000$

Task 2 – Problem Solving

- Put a number in the missing space below to make the sentence correct.
 $4_236460 > 46236460$
 Explain why it is true.

- Do, then explain
 Show the value of the digit 6 in these numbers?
 6787555 95467754
 Explain how you know.

- Put one number in each box so that the list of numbers is ordered largest to smallest.

1	1		3	
1		2		4
1	2	5		
1		5		6
1	3	0		
1		1	5	

- Abdul says "If I add any two 4 digit numbers together is will make a 5 digit number." Do you agree? Explain why.

- Katie was given the calculation below
 $47326 - 1900 =$
 She said "I will just take off 2000 then subtract another 100 so my answer is 45126." Is she correct? Would you use her method? Explain your answer.

- Nancy is using the inverse operation to solve calculations. She is completing the calculation below:
 $\underline{\hspace{2cm}} - 3291 = 5382$
 She says "I can turn the calculation around to get the correct answer."
 She does the following:
 $5382 - 3291 =$
 Is she correct? Why?

- Find the mistake in the calculation below. Correct it and explain what you have done.

$$\begin{array}{r}
 4629 \\
 \times \quad 12 \\
 \hline
 108 \\
 72 \\
 \hline
 36 \\
 204
 \end{array}$$

- Amy is given the calculation 5413×600 . She says "I can do this without a written method." Write down the mental steps you think Amy could do.
- Miss Brown estimates the following:
 $4999 \times 40 = 200000$
 Do you think she was right to that? Explain your reasons.

Task 3 - Reasoning

- Do, then explain

Find out the populations in five countries. Order the populations starting with the largest. Explain how you ordered the countries and their populations.

- Miss Jones, the teacher has four cards. On each card is a number:

42350	43685
56995	56943

She gives one card to each pupil. They each look at them and say a clue.

Alfie says, "My number is 57000 when rounded to the nearest 10."

Ben says "My number has exactly 3 hundreds in it."

Caleb says "My number is 44000 when rounded to the nearest thousand".

Patrick says "My number is exactly 100 less than 57043."

Can you solve who had which card and explain how you know this?

- Claire is given the calculation below to estimate an answer to $1912 + 1888 =$. Claire says "I will just double 1900 which is 3800". Why has Claire done that? Would you do anything differently?

- Three pandas are eating bamboo sticks. There are 51 altogether. They all eat an odd number of sticks. How many bamboo sticks did they each eat? How many different ways can you do it?



- 10 people from different countries meet at an international peace ceremony. Each person shakes the hand of each other person. How many handshakes are there altogether?



- Javid has six white mice, three males and three females. Each of the three couples has 7 female baby mice. The each of these females has 8 babies. One night Javid's little sister Aisha leaves the mice cage open and 47 escape. How many mice does Javid have left?

- Craig says "250 ends in a zero therefore, when multiplying, I can only make 250 by multiplying by 5 or 10." Do you agree? How many ways can you find to disprove this?

- Countdown

What is the closest you can get to any given number e.g. 256 using only multiplication and a list of numbers given e.g. 10, 7, 6, 2, 25, 4?

How do you know this is the closest? What strategy did you use?

- A class are solving multiplication problems using counters. One child arranges their counters like the diagram below.

The question is $23 \times 3 =$

20	10	1	1	1
10	10	1	1	1
10	10	1	1	1

Is this the only way to represent this calculation? How many ways can you find?

Optional tasks:

Below are also some activities you can complete, if you wish. Please feel free to share some answers us through photos, written answers or scanned copies of your work for us to post online.

Activity 1 – Symmetry

Draw a reflection of any word in mirror lines placed at different angles relative to the word you have chosen.

E.g.



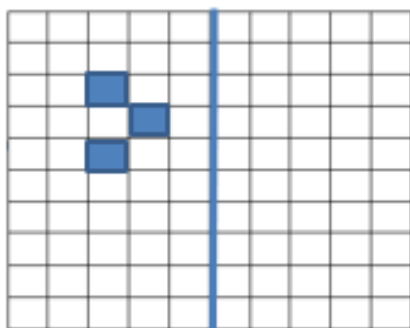
Activity 2 – The odd one out



Remember – there can be more than one answer to this challenge.

Activity 3 – Symmetrical patterns

- 1) Create a 10x10 grid with a ruler and pencil (or print one off the computer if you can).
- 2) Draw on a line of symmetry which is either vertical, horizontal or diagonal.
- 3) Create a coloured pattern on one side and reflect it based on your chosen line of symmetry.



Make sure you use loads of colours and get creative with your designs!