## Class 11 Maths

In order to help you with all of your maths learning, it is important that you are practising your times tables regularly. If you have good times tables knowledge, you will find other areas of maths easier.

Remember to go on to Times Tables Rockstars regularly:
https://play.ttrockstars.com/auth
Your login is the same as the one you use in school.
Numberbots also uses the same login as TTRockstars. See the link below:
https://play.numbots.com/\#/account/search-school

## Counting

To count in multiples of 6, 7, 9, 25 and 1,000

## Vocabulary

Knowing your times tables well will help you with this work.
Multiples
A number that may be divided by another a
certain number of times without a remainder.
Use the grid below to help you identify the multiples to 100 of $6,7,9$ and 25 . E.g. multiples of $6: 6,12,18 \ldots$

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| multiples of |  |  |  |  |  |  |  |  |  |
| 6,7,9, and 25 |  |  |  |  |  |  |  |  |  |

## Complete these number sequences:

6, $\qquad$ 18, $\qquad$ 36

7, $\qquad$ 42, $\qquad$ What are these mutliples of?

१, 18 , $\qquad$ 36, $\qquad$ 54, $\qquad$
$\qquad$ 81

Have a go at these questions to help remind you about place value and counting in multiples.

1) Complete the number patterns:
a) $4,000,5,000$, $\qquad$ 7,000, 8,000, $\qquad$ , $\qquad$ 11,000
b) $9,000,8,000,7,000$, $\qquad$ , _ 4,000, 3,000
c) $2,000,4,000,6,000$, $\qquad$ ,
2) What are the missing numbers? Which multiple are we counting in?

3) Complete the number sequences and identify which multiple we are counting in.
a) 60,54 , $\qquad$ , _, , 30, 24, $\qquad$ 12
b) 49, $\qquad$ 35, $\qquad$ 21, $\qquad$ 7
c) 99,90, $\qquad$ 72, $\qquad$ 54, $\qquad$
4) Write down the first 6 multiples of:
$6,7,9,25$ and 1,000
5) Write down the next 4 multiples of 9 from 36 .

36, $\qquad$ , ——, ,
6) True or false?

Multiples of 3 and multiples of 6 have a common multiple.
Explain your answer.

Vocabulary: Common multiple This means that a whole number is a shared multiple in each set of numbers. Hint: you are looking for a number that is the same in
7) Hayley is counting in 25 s and 1,000 s. She says, Multiples of 1,000 are also multiples of 25. Multiples of 25 are therefore, multiples of 1,000. Are these statements always, sometimes or never true?

Hint: I would write down the multiples of 25 and the multiples of 1,000 and see if they are always the same, sometimes the same or never the same.
8) a) What digits do multiples of 1,000 end in? Prove it.
b) What digits do multiples of 25 end in? Prove it.
9) a) True or false? If I count in 1,000 from zero, I will always have an even answer.
b) Convince me that the number 14 will be in this sequence if it is continued...

49, 42, 35, 28 ...
10) a) How many steps of 9 are there between 243 and 270 ?
b) What is the same and what is different about these number sequences?
$6,12,18,24,30 \ldots$
$45,36,27,18,9 \ldots$

## Place Value

## To recognise the place value of each digit in a four-digit number

## Arithmetic

This should be a recap of your learning in maths this year. We are using our place value knowledge to help us to think about the value of each of the digits in a given number.

Look at the example below which will help explain this.
Find the value of 5 in the number 2,358.

1) First you can put the number into the place value grid like I have below.
2) Find the number 5 and look at what that column is showing. Tens
3) Identify the column (tens) and think about what ten lots of 5 is worth. $\mathbf{1 0} \times \mathbf{5}$
4) Write down your answer. 50

| Th | $H$ | $T$ | 0 |
| :---: | :---: | :---: | :---: |
| 2 | 3 | 5 | 8 |

Use this method to help you to work out the following:

1) Choose the numbers where the number 7 has a tens value.

3,437

$$
8,771
$$

4,507

## 5,467

2) Choose the numbers where the number 3 has a thousands value.

3,204

6,203
5,033

8,832
4,143
3,783
3) Write down the number the children are thinking of.
a) My number has 2 thousands, 2 hundreds, 2 tens and 2 ones.
b) My number has 6 thousands, 7 hundreds, 8 tens and 9 ones.
c) My number has 5 thousands, 6 ones, 1 hundred and 2 tens.
4) Complete the table

| Number | Words | Expanded Form |
| :---: | :---: | :---: |
|  | $\qquad$ thousands $\qquad$ hundreds $\qquad$ tens $\qquad$ ones | $\begin{aligned} & 1,000+500+20+3 \\ & = \end{aligned}$ |
|  | 4 thousands 3 hundreds 6 tens <br> 1 ones | $=\square$ |

