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

Recap- Comparing and ordering

a. Use the following digits to make the largest number possible and the smallest 4-digit number possible.
   1) 5 2 9 1
   2) 8 3 7 2
   3) 6 4 8 0

b. Order the numbers below from smallest to largest.

   1) 564   456   546   654   465   645

   2) 8,716   7,178   8,617   7,186   6,718   6,817   8,176

   3) 6,592 9,256 6,295 9,562 6,952 5,962

   4) 12,604   14,620   16,240   12,460   14,602 16,402   14,260

Hint: Use your place value knowledge to help you to complete this activity. All of the numbers use the same digits but in a different order. Think about how you can use the activity from section a (make the largest number possible and the smallest number possible) to help you with your second ordering activity. For the largest number, which column needs to have the largest digit? Which should have the smallest digit?

Counting

We are going to introduce Roman numerals into our counting this week. Although we have not done it yet this year, some of you have done this last year and I was told that you were great at it. Here is a song to remind you of what each of the numerals stand for (it's very catchy and you know me, I love songs to help me remember things).

https://www.youtube.com/watch?v=z1UmAgekzbs

Focus: to count in Roman numerals

There are 7 main letters used for the Roman numerals. All other remaining numbers are made from these letters.

There are 7 letters used for Roman numerals:

I = 1
V = 5
X = 10
L = 50
C = 100
D = 500
M = 1000

Numbers other than those above are made by creating simple sums e.g.
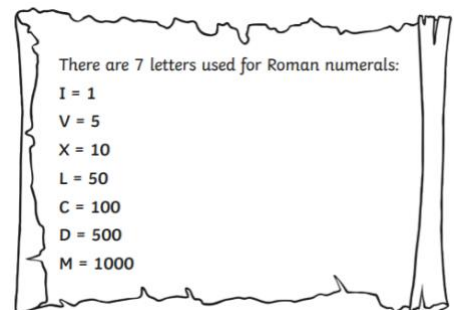
Number	Sum	Roman Numeral
12	10 + 2	XII
7	5 + 2	VII

When adding numerals to make a number, the extra digit is placed to the right of the largest number e.g.		
13	10 + 3	XIII
To stop numerals getting too big, only three of the same value are allowed in a row. To help with this we can show a number by 'subtracting' a numeral e.g.		
9	1 less than 10	IX
The letter being removed goes before the larger number. There is only ever one letter subtracted.		

1) Can you count using Roman numerals from 1-10?

Fill in the missing letters and then recite this aloud.

I, II, ..., IV, ..., VI, ..., ..., IX, ...

2) Can you count from 1-20 using Roman numerals?

Challenge: Can you write down all the Roman numerals from 1-100?

Arithmetic

Focus: to round to the nearest 10, 100 and 1,000

When you are given a number and asked to round it to the nearest ten, hundred or one thousand remember the song.

https://www.youtube.com/watch?v=3afU6JQG15I

For example, if you are asked to round 41 to the nearest 10.

- First, you will circle the place value column we are focusing on- this time it will be the tens column so I would circle the 4.
- Next, I would look for the nearest 10s to my given number (41). The nearest 10s to 41 are 40 and 50. I would then look right next door which will be the ones column which is a 1 digit.
- If the digit is 5 or more, I would round up, if it is 4 or less I would round down.
- The 1 digit is telling me that I round down to the nearest 10.
- Finally, I found that my nearest 10 if I round down would be 40, so 41 rounded to the nearest 10 is 40.

Below I have attached an example of how I would do this if I was given the number 67.

67 rounded to the nearest 10.

60   67   70
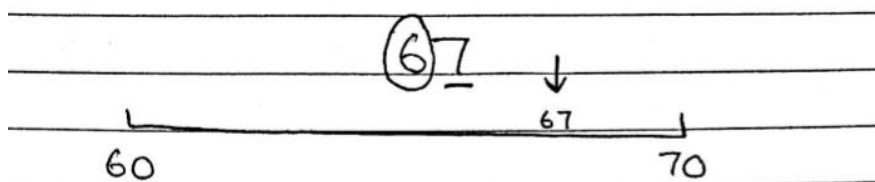
7 tells me to round up to 70.

67 to the nearest 10 is 70.

Now have a go at the questions below using this method.

Round each of the following numbers to their nearest 10.

1) 34
2) 89
3) 12
4) 55
5) 99

6) 183
7) 105
8) 896
9) 1,875
10) 2,692

The same process is used for when rounding to the nearest 100 and the nearest 1,000.

First, you need to identify the place value column you are being asked to look at.

If you had the number 234 and were asked to round this number to the nearest 100, you would circle the 2-digit in the hundreds column. You would then look to the right and underline that digit which is the 3-digit in the tens column. This digit tells you whether to round up to 300 or down to 200. The 3 says that we need to round down so 234 rounded to the nearest 100 would be 200.

Follow this same process for the nearest thousand but this time circle the thousands column and then underline the hundreds column which will tell you whether you should round up or down.

Round the following numbers to the nearest 100
1) 781
2) 167
3) 502
4) 990
5) 1,290
6) 2,045
7) 4,781
8) 12,456

Round the following numbers to the nearest 1,000
1) 2,670
2) 4,122
3) 4,562
4) 12,300
5) 24,677
6) 46,545
7) 134,304
8) 342,708

If you finish all of these, have a go at the following word problems which involve rounding.

1. A supermarket sells 187 cartons of yoghurt a week.
How many cartons is this to the nearest 10 and nearest 100?

2. There are 35 245 spectators at a football match.
How many is this to the nearest 10, nearest 100 and nearest 1000?

3. A newspaper reports that about 12 400 people attended a parade.
How is this rounded and what is the range of the precise attendance?

4. There are 12 876 adult tickets and 5621 child tickets sold for a concert.
To the nearest 10 and nearest 100, how many tickets are sold altogether?

5. A shop has 2349 tins of tomatoes in stock. It sells 782 in a week.
To the nearest 10, how many will be left?
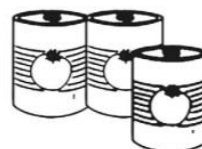
6. An office receives about 35 letters per day.
To the nearest 10, how many letters does it receive in a working week (5 days)?