

Wednesday 1st July 2020

Partitioning and Rounding

Hi Yachts!

Mental Maths

Choose the best option for you then solve it in your head.

Option 1: Start at 100 and count down in 10s until you reach 0. Do you notice a pattern?

Option 2: Start at 0 and count up in 6s until you reach 60. Do you notice a pattern?

Option 3: Choose any three-digit number. Add 300 to it. Subtract 300 from it. Repeat with two more three-digit numbers.

Choose the best set of questions below for you to answer, or you could try all of them! Use the RUCSAC method to solve the problems:



Read

Read the question carefully.



Underline

Underline or write down the keywords and numbers.



Choose

Choose the correct operation (+ - x or ÷) and a mental or written method of calculation (you could use diagrams).



Solve

Solve it! Make sure you follow the steps carefully.



Answer

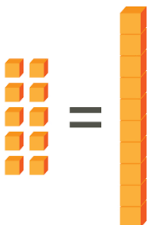
Check that you have answered the question properly. What did you need to find out in the first place?



Check

Check your answer. Use the inverse calculation or another checking technique (was it close to your estimate?)

Remember that 10 ones is the same as 1 ten:



1. All of these statements are true. Can you explain the pattern using the words 'tens' and 'ones'?

57 is made of 5 tens and 7 ones.

57 is made of 4 tens and 17 ones.

57 is made of 3 tens and 27 ones.

57 is made of 2 tens and 37 ones.

57 is made of 1 ten and 47 ones.

57 is made of 0 tens and 57 ones.

2. Can you use question 1 to help you to find some different ways of partitioning (splitting) 48?

48 is made of 4 tens and 8 ones.

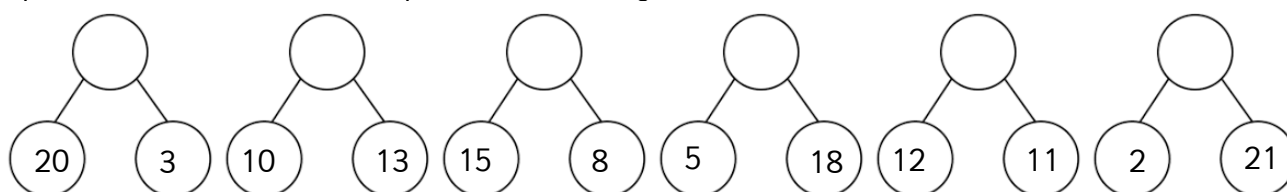
48 is made of ___ tens and ___ ones.

48 is made of ___ tens and ___ ones.

48 is made of ___ tens and ___ ones.

48 is made of ___ tens and ___ ones.

3. Complete the part-whole models to show some of the different ways that the number can be partitioned (split). Remember that the two parts must add together to make the whole.

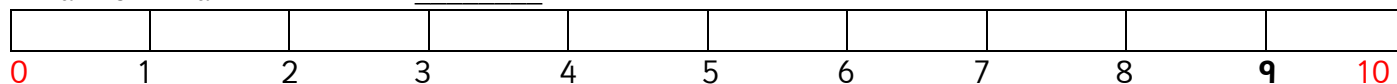


4. What do you notice about the second and third part-whole models?
5. What do you notice about the fourth and fifth part-whole models?

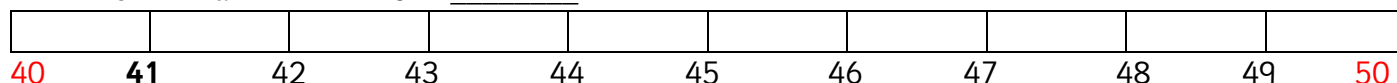
6. Complete this pattern: 10 ___ 40 ___ 60 ___ 100

7. We are going to look at **rounding**; finding the nearest multiple of 10 to a number.

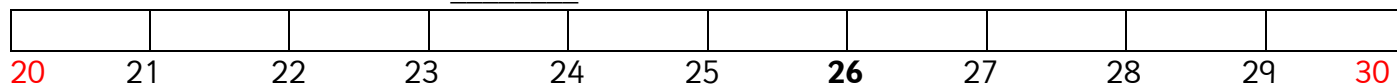
- a. Is 9 nearer to 0 or 10? _____



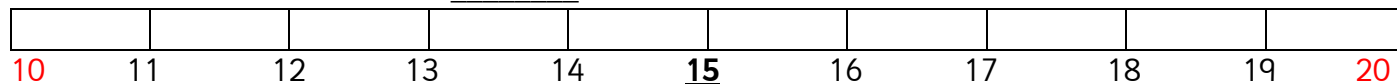
- b. Is 41 nearer to 40 or 50? _____



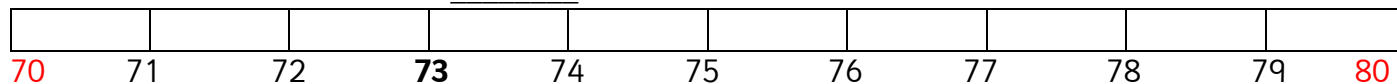
- c. Is 26 nearer to 20 or 30? _____



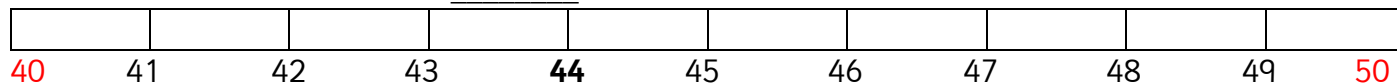
- d. Is 15 nearer to 10 or 20? _____



- e. Is 73 nearer to 70 or 80? _____



- f. Is 44 nearer to 40 or 50? _____



- If the ones digit is 5, 6, 7, 8 or 9, we round the number **up** to the next ten.

- 40
- 300
- 450