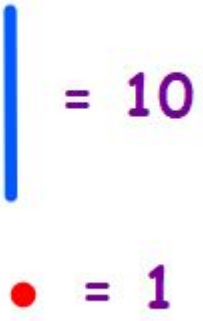
Using chips and peas to solve maths calculations.

Chips and Peas

In maths we use chips and peas to help us represent our numbers and solve number sentences.

1 chip is worth 10.
1 pea is worth 1.



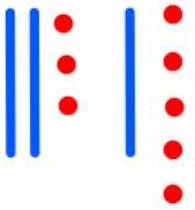
For example, if we wanted to represent the number 13 with chips and peas it would look like this;

1 chip = 10 and then we add the 3 peas. Therefore, 10 + 3= 13.

If we wanted to represent the number 45 with chips and peas it would look like this;

Addition

23+15=



1: Draw your chips and peas. For the number 23 we need 2 chips and 3 peas. For the number 15 we need 1 chip and 5 peas.

2: Count up your chips and peas, starting with your chips: 10, 20, 30, 31, 32, 33, 34, 35, 36, 37, 38.

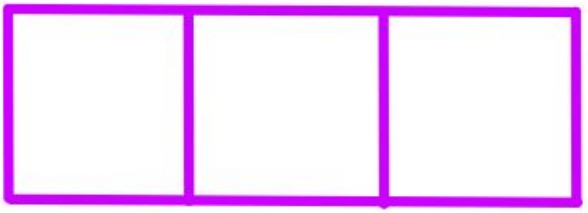
3: Write your answer next to the equals sign.

23+15=38

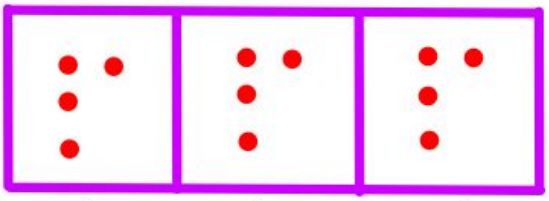
Division

12÷3=

1: Look at the number that you are dividing by. In this calculation we are dividing by 3. Draw that number of boxes.



2: Share your 12 peas **evenly** into the three boxes.



3: Write down how many peas are in each box. If the boxes are not equal, check your calculations.

4: The answer is how many peas are in one box.
Therefore, the answer for this calculation is 4. Write the answer 4 next to the equals sign.

12÷3=4

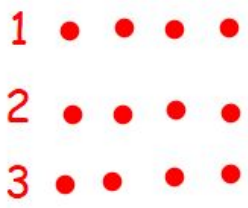
Multiplication

When we multiply in Year 2, we use arrays.
When drawing arrays, we can use columns or rows.

Rows

3x4=

1: You need to draw 3 rows each with 4 peas in.

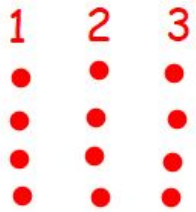


2: Write how many rows you have drawn at the side so you only draw 3 rows with 4 peas in.
3: Then count how many peas you have drawn in total. You can use your times table to help you!
4: Write the answer next to the equals sign. The answer is 12.

Columns

3x4=

1: You need to draw 3 columns each with 4 peas in.



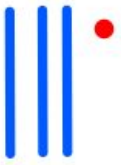
2: Write how many columns you have drawn at the top so you only draw 3 columns with 4 peas in.

3: Then count how many peas you have drawn in total. You can use your times table to help you!

4: Write the answer next to the equals sign. The answer is 12.

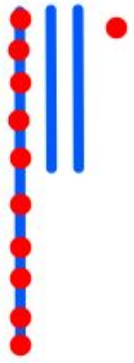
Subtraction

31 - 17 =



1: Draw your chips and peas for your first number only.
2: Decide if you need to swap a chip for 10 peas. We need to swap a chip for 10 peas with this calculation because we need to subtract 7 peas and we only have 1 pea in the number 31.

31 - 17 =



3: Make one chip longer and turn it into 10 peas.
4: Cross out 1 chip and 7 peas.
5: Count up how many chips and peas you have left. Start with the chips, 10, 11, 12, 13, 14.
6: Write the answer next to the equals sign.

31 - 17 = 14