Wheeler Primary School

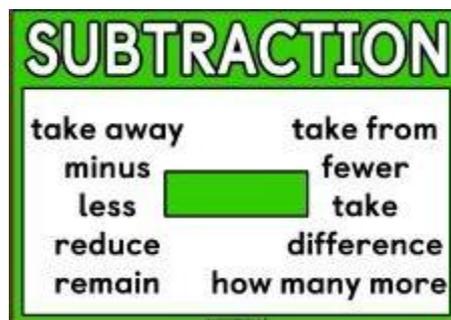# Steps to Success
for the four operations

Parents' Edition

Key Stage 1

Addition- **Addition** is finding the total, or sum, by combining two or more numbers If you have 2 apples and add 5 you will have 7 apples. Example: 5 + 2 = 7 is an **addition**.
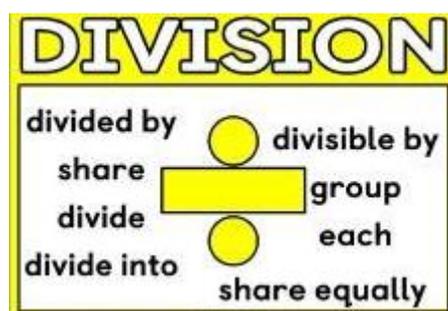
ADDITION

add   increase
plus   more
and   sum
total   together

Subtraction- Taking one number or amount away from another. If you have 5 apples and you **subtract** 2, you are left with 3. The symbol of **subtraction** is – Example: 5 – 2 = 3

SUBTRACTION

take away   take from
minus   fewer
less   take
reduce   difference
remain   how many more

Multiplication- The basic idea of **multiplication** is repeated addition. You can find lots of a given number. For example: 5 lots of 3= 5x3

MULTIPLICATION

multiply   groups of
times   lots of
product   doubled
multiplied   times tables
by
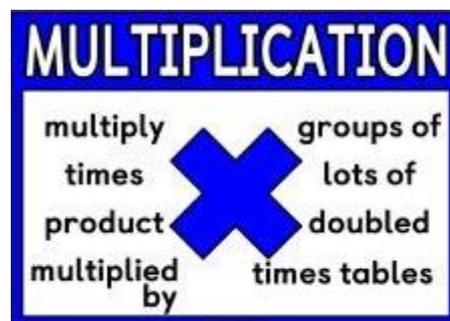
Division- **Division** is splitting into equal parts or groups. It is the result of "fair sharing". Example: there are 12 chocolates, and 3 friends want to share them, how do they divide the chocolates?
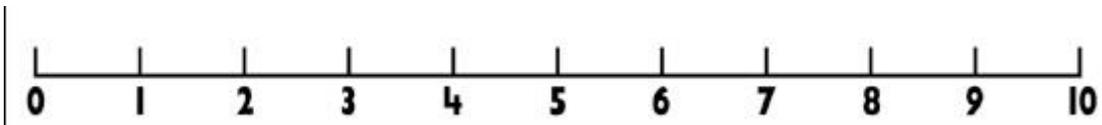
DIVISION

divided by   divisible by
share   group
divide   each
divide into   share equally

Addition
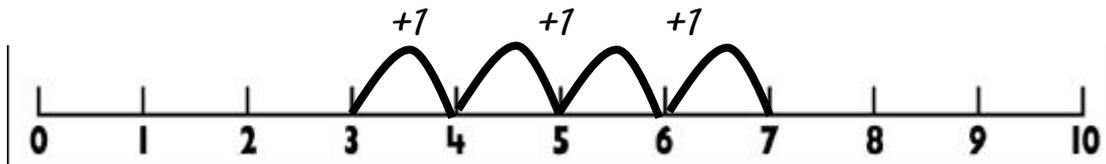
Number line (Year 1)

1. Find the **first number** from your number sentence on the number line.
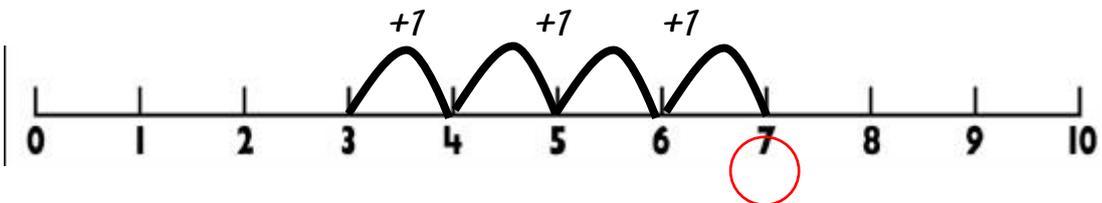

2. **Count on** by the second number in ones, drawing on the jumps.

3. The number you **land on** is your answer.

4. Use the answer to **complete your number sentence**.

Empty number line (Year 2)

34 + 23 =

1. Write the **biggest number** from your number sentence on the start of your number line.

2. **Count on** by the smaller number in ones or tens, drawing on the jumps and labelling them.

3. The number you reach **after counting on** is your answer.

4. Use the answer to **complete your number sentence**.

23 + 42 = <u>65</u>
20 + 40 = 60
3 + 2 = 5
60 + 5 = 65

1. Look at the **tens column** in each number to work out how many tens you have.

2. **Add the tens** together, showing the number sentence.

3. Look at the **ones column** in each number to work out how many one you have.

4. **Add the ones** together, showing the number sentence.

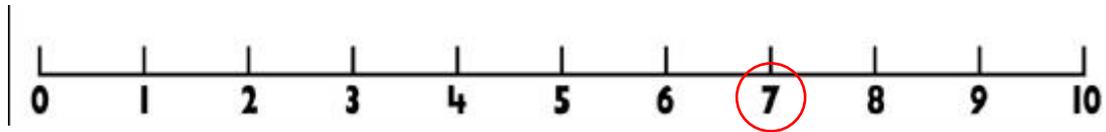5. Add your **two answers together** (tens and ones) to find your final answer.

Subtraction

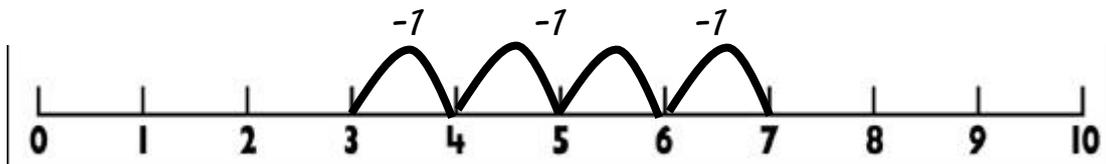SUBTRACTION
take away   take from
minus   fewer
less   take
reduce   difference
remain   how many more
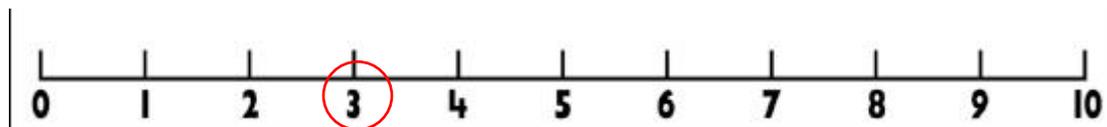
Number line (Year 1 and 2)

1. Find the **biggest number** from your number sentence on the number line.

2. **Count back** to the smaller number in ones, drawing on the jumps.

3. The number you **land on** is your answer.

4. Use the answer to **complete your number sentence**.

Empty number line (Year 2)

$$47 - 23 = 24$$

1. Write the **biggest number** from your number sentence on the end of your number line.

2. **Count back** by the smaller number, drawing on the jumps and writing the number you have reached after each jump.

3. The number you *reach* **after counting** back is your answer.

4. Use the answer to **complete your number sentence**.

Partitioning (Year 2)

67 – 32 = 35
60 – 30 = 30
7 - 2 = 5
35 + 5 = 35

1. Look at the **tens column** in each number to work out how many tens you have.

2. **Subtract the tens** in the smaller number from the larger number, showing the number sentence.

3. Look at the **ones column** in each number to work out how many one you have.

4. **Subtract the ones** in the smaller number from the larger number, showing the number sentence.

5. Add your **two answers together** (tens and ones) to find your final answer.

Multiplication

MULTIPLICATION

multiply   groups of
times   lots of
product   doubled
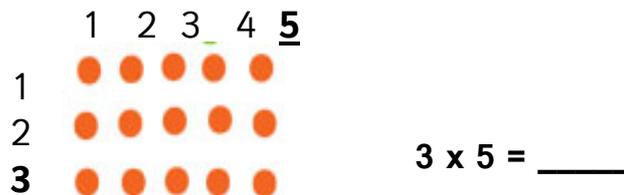multiplied   times tables
by
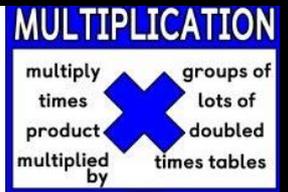
Given Arrays (Year 1 and 2)

  1. Look at your array.

  2. Count the number of rows. This gives you the first number in your calculation.

  3. Count the number of objects in each row. This gives you the second number in your calculation.

```
    1  2  3  4  5
1   •  •  •  •  •
2   •  •  •  •  •
3   •  •  •  •  •
```
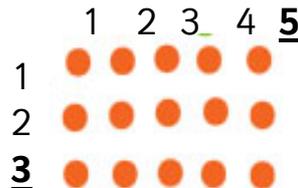
  4. Put the two numbers together into a multiplication number sentence using x and =.

```
    1  2  3  4  5
1   •  •  •  •  •
2   •  •  •  •  •          3 x 5 = _____
3   •  •  •  •  •
```

  5. Count the total number of objects in the array to find your answer.

```
    •  •  •  •  •
    1  2  3  4  5
    •  •  •  •  •
    6  7  8  9  10         3 x 5 = 15
    •  •  •  •  •
   11 12 13 14 15
```
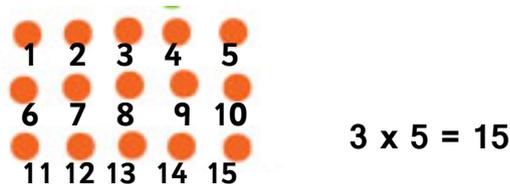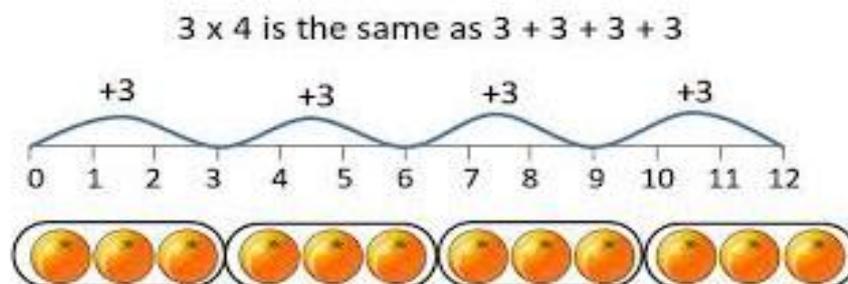
Drawing Arrays (Year 2)

  1. Read the calculation.

  2. The first number in your calculation tells you the number of rows.

  3. The second number in your calculation tells you the number of objects in each row.

  4. Draw your array in neat rows.

  5. Count the total number of objects in the array to find your answer.

Repeated addition (Year 2)

1. **Draw a number line** using a ruler.
2. **Count back** in one group of the multiplier and draw a jump.
3. **Label your jump** with how much you have added and show where you have reached on the number line.
4. **Repeat** until you have added the multiplier as many times as the number sentence states.
5. The number you **finish** on is your answer.

3 x 4 is the same as 3 + 3 + 3 + 3

```
   +3        +3        +3        +3
 ⌢         ⌢         ⌢         ⌢
0  1  2  3  4  5  6  7  8  9  10  11  12
```

Partitioning (Year 2)

$$38 \times 5 = (30 \times 5) + (8 \times 5)$$
$$= 150 + 40$$

1. **Partition** your larger number into tens and ones.
2. **Multiply the tens** by the single digit (multiplier) and write out the number sentence including the answer.
3. **Multiply the ones** by the single digit (multiplier) and write out the number sentence including the answer.
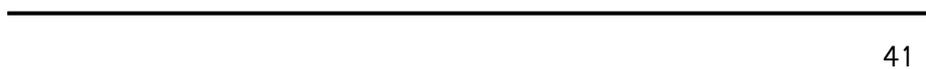4. **Add your answers** together to get your final answer.
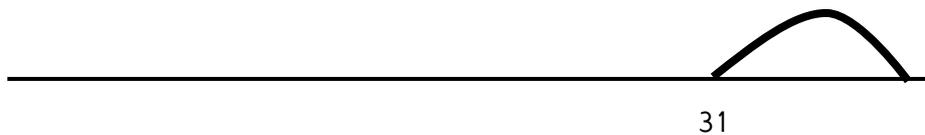
Division
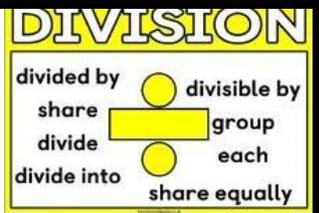
Repeated subtraction on a number line (Year 2)

1. **Draw a number line** using a ruler.

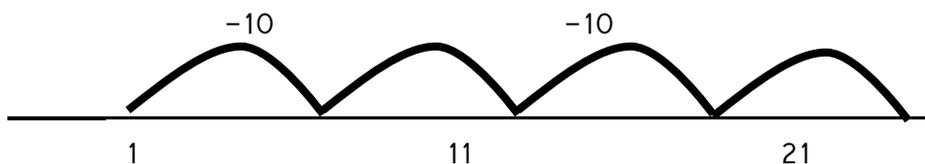2. Put the number to be divided (dividend) at the **end** of the number line.

$$41 \div 10 =$$

41

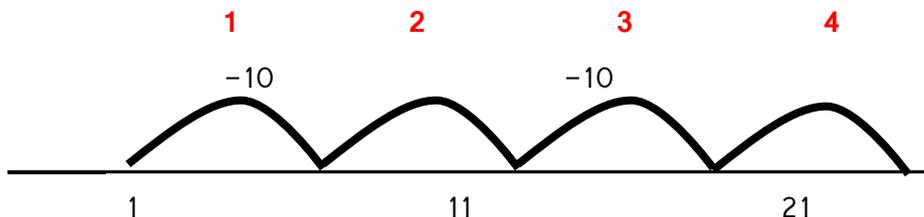3. **Count back** in one group of the divisor and draw a jump.

31

4. **Label your jump** with how much you have taken away and show where you have reached on the number line.

−10

31

5. **Repeat** until you reach zero or a number that is smaller than the divisor.

−10   −10

1   11   21

6. **Count the number of jumps** to find your answer and show any remainders, looking at the number your jumps finished on.

1   2   3   4

−10   −10

1   11   21

$$41 \div 10 = 4 \text{ r } 1$$