

## Division tips

When dividing numbers you'll start to notice lots of **patterns**. Here are some common patterns and ways of dividing that will soon help you get to grips with **splitting up numbers**. A number is **divisible** by another number if there is **no remainder** when you divide.

**Even numbers:** If a number is **even** it's always **divisible** by **2**.  
Even numbers end in 0, 2, 4, 6, or 8.

**Numbers that end in 0 or 5:** If a number ends in **0** or **5** it's always **divisible** by **5**.

**Numbers that end in 0:** If a number ends in **0** it's always divisible by **2, 5** and **10**.

### What other division patterns can you find?

**Dividing by 2:** Dividing by 2 is the same as **halving** a number. A quick method is to **split** the number into **tens** and **units** and **halve**:  
 $74 \div 2$  is half of 70, which is 35 plus half of 4, which is 2.  
 If you add together 35 and 2 it gives you the answer: **37**.

You can also **split** the numbers up to make it easier to halve. For example:

74 is the same as  $60 + 14$ . So:

$74 \div 2$  is half of 60, which is 30 plus half of 14, which is 7.

If you add together 30 and 7 it gives you the answer: **37**.

**Dividing by 4:** Remember that  $2 \times 2 = 4$ . Dividing by 4 is the same as **halving** and **halving again**:  
 $48 \div 4$  is half of 48, which is 24 and half of 24, which is 12.

**Dividing by 10:** To divide by 10 move all the numbers one place value to the right:  
 $90 \div 10 = 9$

tens	units	move the number one place value to the right	tens	units	.	tenths
9	0				9	.

**Splitting into factors:** You can **split** numbers into **factors** to make them easier to divide:  
 $90 \div 6 = (90 \div 3) \div 2 = 30 \div 2 = 15$

### Checking your calculations

Multiplication and division are linked. They are the **opposite** action of each other:

$10 \times 5 = 50$	$50 \div 5 = 10$	or	$50 \div 10 = 5$
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When you carry out a division you can check your answer using **multiplication**.