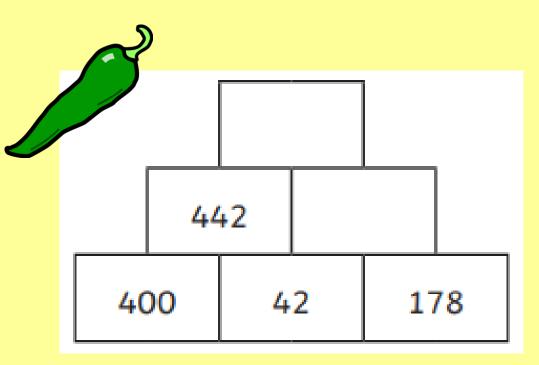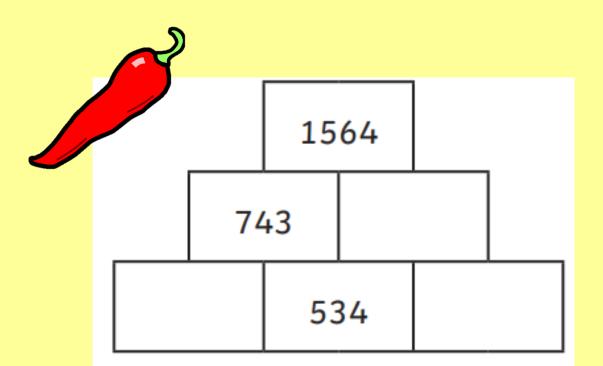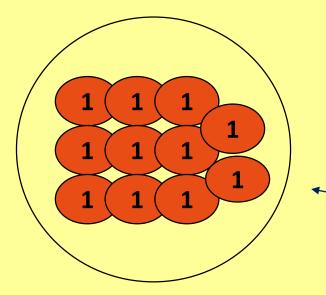LO: To be able to multiply and divide by 1 and 0.

Today we will be looking at multiplying and dividing by 1 and 0.

But first, lets warm our brains up.
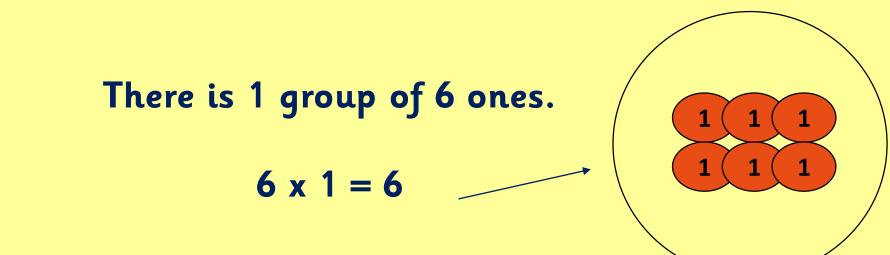Use addition and subtraction to solve the number pyramids. Add to go up, subtract to come down.

Green pyramid:
- Top: (empty)
- Middle: 442, (empty)
- Bottom: 400, 42, 178

Red pyramid:
- Top: 1564
- Middle: 743, (empty)
- Bottom: (empty), 534, (empty)

Look at the place value counters.
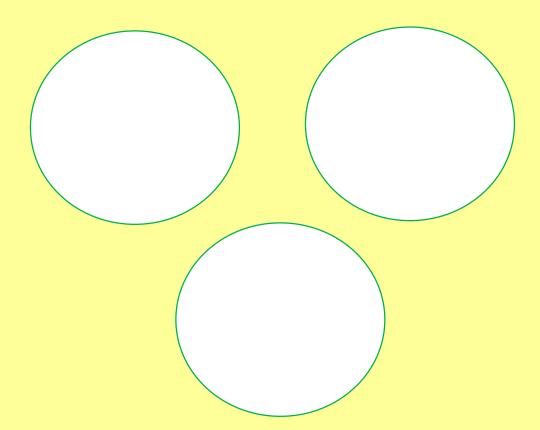
There is 1 group of 11 ones.

11 x 1 = 11

There is 1 group of 6 ones.

6 x 1 = 6

What do you notice about multiplying by 1?

Look at the groups below.

There are 3 groups of no ones.
$$3 \times 0 = 0$$
What do you notice about multiplying by 0?

Now it's your turn, can you complete these calculations?

$0 \times 0 =$	$42 \times = 42$	$1 \times 1 =$	$1 \times = 432$

Now it's your turn, can you complete these calculations?

$0 \times 0 = 0$	$42 \times 1 = 42$	$1 \times 1 = 1$	$1 \times 432 = 432$

Did you get them correct?

We can also use bar models to complete calculations. Can you complete the bar model for 1 x 9 = 9?
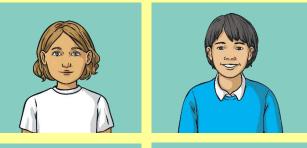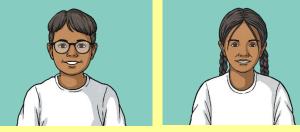
9

Can you write all of the sums in the fact family?

Have a look at division.

Four pencils were shared equally between four children. How many pencils did each child get? Circle the bar model that could be used to solve this problem, before calculating the answer.

Circle the correct bar model to match this problem?

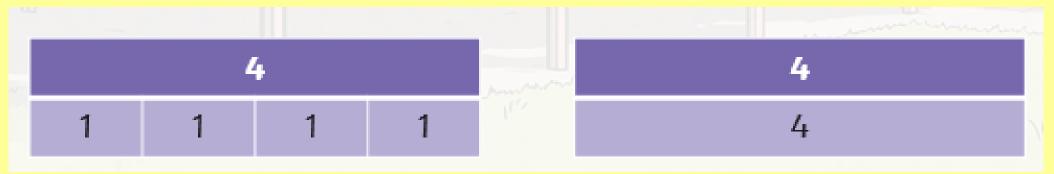| 4			
1	1	1	1

4
4

Have a look at division.

Four pencils were shared equally between four children. How many pencils did each child get? Circle the bar model that could be used to solve this problem, before calculating the answer.

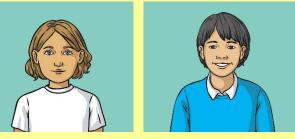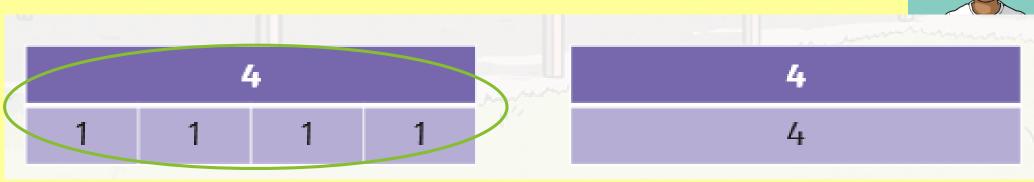**Circle the correct bar model to match this problem?**

4

1	1	1	1

4

4

$$4 \div 4 = 1$$

Well done!

Now it's your turn. Try these calculations.

Complete these calculations.

$77 \div 1 =$

$94 \div = 1$

$ = 337 \div 1$

$ = 8925 \div 8925$

Now it's your turn. Try these calculations.

Complete these calculations.

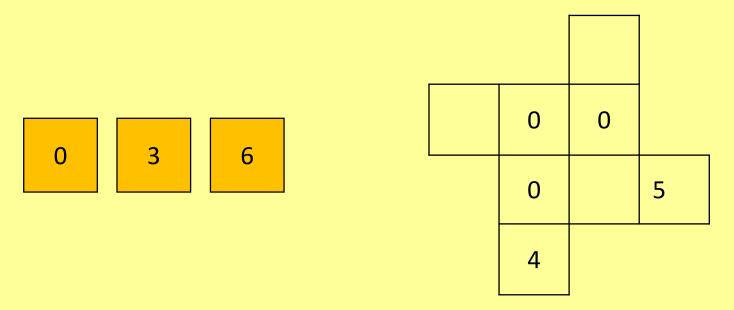$77 \div 1 = 77$

$94 \div 94 = 1$

$337 = 337 \div 1$

$1 = 8925 \div 8925$

Did you get them right?

Tricky Challenge: Y4 children can now try a tricky challenge if they would like to. Everyone else can now start their worksheet.
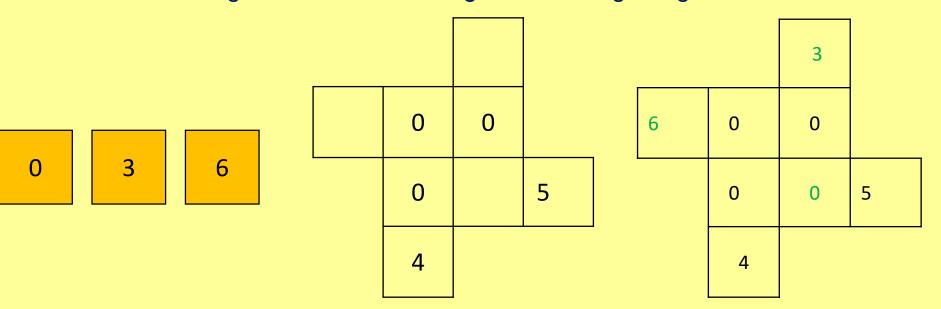
Using the digit cards below, complete the diagram. Each row and column must multiply together to make 0. For every solution, each digit card may only be used once.

Please remember to complete some revision on Times Tables Rock Stars when you have finished.

Tricky Challenge: Y4 children can now try a tricky challenge if they would like to. Everyone else can now start their worksheet.

Using the digit cards below, complete the diagram. Each row and column must multiply together to make 0. For every solution, each digit card may only be used once.

Here is on solution!