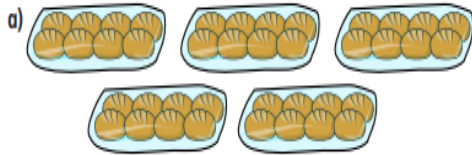
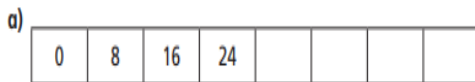


The 8 times-table

1 What multiplications are represented?



2 Complete the number tracks.



3 Here is an array made up of triangles.



- a) What multiplication sentence can you see?
 b) What division sentence can you see?

4 Complete the calculations in your head.

- a) $6 \times 8 = \square$ d) $\square = 8 \times 4$ g) $\square \div 8 = 5$
 b) $8 \times \square = 56$ e) $72 \div 8 = \square$ h) $8 \times 1 = \square$
 c) $10 \times 8 = \square$ f) $\square \div 11 = 8$

5 What multiplication can you see?

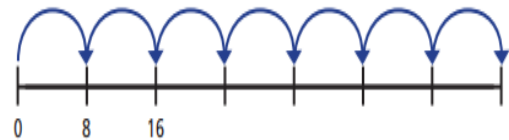


6 Complete the multiplications.

- a) $2 \times 8 = \square$ $4 \times 8 = \square$ $8 \times 8 = \square$
 b) $8 = 8 \times \square$ $16 = 8 \times \square$ $32 = 8 \times \square$

What patterns do you notice?

7 a) Amir draws 7 jumps of 8 on a number line.



What number does Amir end on?

Explain how you worked it out.

b) This time, Amir makes 7 jumps of 8, but starts from 1

What number does Amir end on this time?

Explain how you know.

Multiply and divide by 7

1 Complete the sentences.

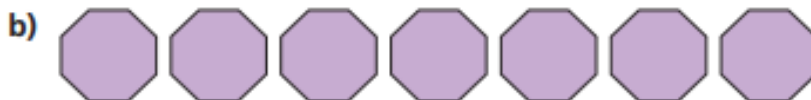


There are triangles.

There are sides on each triangle.

$$7 \times 3 = \text{}$$

There are sides altogether.



There are octagons.

There are sides on each octagon.

$$\text{} \times \text{} = \text{}$$

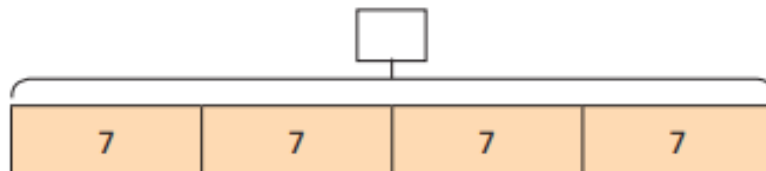
There are sides altogether.

2 There are 7 players in a netball team.



a) How many players are there in 4 netball teams?

Label the whole on the bar model



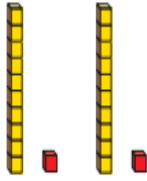
Complete the sentences.

$$\text{} \times \text{} = \text{}$$

There are players in 4 netball teams.

11 and 12 times-table

1 The base 10 represents 2×11



$$2 \times 11 = 22$$

Use base 10 to work out 3×11

Draw your base 10 and complete the multiplication.

$$3 \times 11 = \square$$

2 Complete the calculations.

$$5 \times 11 = \square$$

$$7 \times 11 = \square$$

$$9 \times 11 = \square$$

$$4 \times 11 = \square$$

$$6 \times 11 = \square$$

$$3 \times 11 = \square$$

$$10 \times 11 = \square$$

$$12 \times 11 = \square$$

3 Rosie is spotting patterns in the 11 times-table.

When I add together the digits of each multiple of 11, I always get an even number.

$$2 \times 11 = 22$$

$$2 + 2 = 4 \text{ which is an even number}$$



a) Do you agree with Rosie?

Explain your answer.

b) What else do you notice?

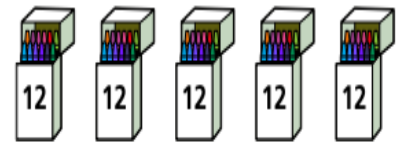
What other patterns can you see in the 11 times-table?

Talk about it with a partner.



4 Crayons come in packs of 12

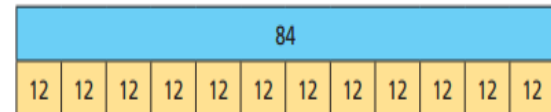
Dora buys 5 packs of crayons.



How many crayons does she have?



5 Ron uses a bar model to represent 84 divided by 12



a) Explain Ron's mistake.

b) Draw the correct bar model diagram to represent 84 divided by 12

6 Amir is making pictures using shapes.

Here is one picture.



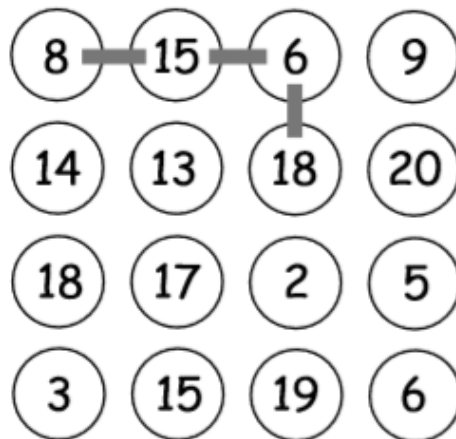
Joins

Join any four numbers.

Find their total.

Joins can go up, down or sideways, but not diagonally.

The score shown is $8 + 15 + 6 + 18 = 47$.



Find the highest possible score.

Find the lowest possible score.

Try joining five numbers.

Now try joining five numbers using only diagonal joins.

Counting in 10s, 100s, 1,000s, 10,000s and 100,000s

1 Complete the sequences and describe what is happening.

a) 7, 17, , 37, 47, , 67

b) 109, , , 139, 149, , 169

c)

475		675		875		
-----	--	-----	--	-----	--	--

d)

6,300		8,300	9,300			
-------	--	-------	-------	--	--	--

e)

6,300		6,280	6,270			
-------	--	-------	-------	--	--	--

2 a) Count up in 10s starting from 4

b) Count up in 100s starting from 4

c) Count up in 1,000s starting from 4

d) What is the same and what is different about all of your answers?



3 Here is part of a sequence.

... 7,450 7,550 7,650 7,750 7,850 7,950 ...

Circle all the numbers below that will appear in the sequence.

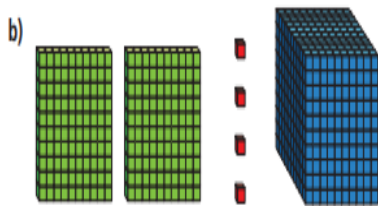
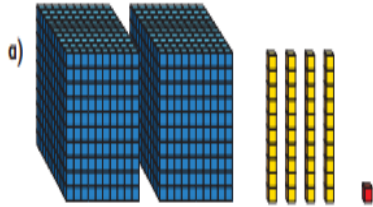
7,505 9,150 6,050 7,591 16,500 155,250

Explain your answer.

Write three other numbers that will also appear in the sequence.

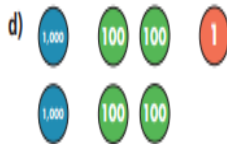
Numbers to 10,000

1 What numbers are represented?

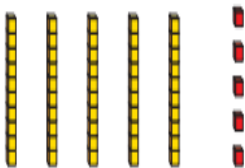
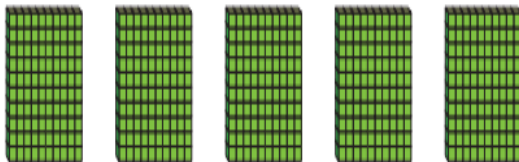


c)

TTh	Th	H	T	O



2 a) Circle 412



b) Draw counters in a place value chart to represent 5,321

3 Complete the calculations.

a) $2,865 + 1$

$2,865 + 10$

$2,865 + 100$

$2,865 + 1,000$

b) $1,256 - 1$

$1,256 - 10$

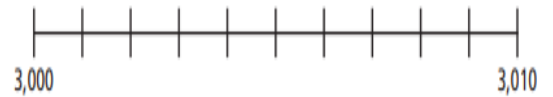
$1,256 - 100$

$1,256 - 1,000$

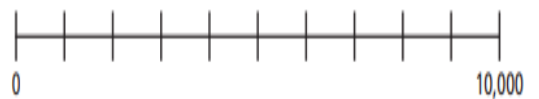
4 Complete the table.

	1 more	10 more	100 more	1,000 more
3,000				
7,213				
	4,511			
		1,291		
				2,899
			6,059	

5 a) Draw an arrow to 3,009 on the number line.



b) Draw an arrow to 2,500 on the number line.



Multiply 2-digits by 2-digits

1 Work out the multiplications.

a) 6×6

6×60

b) 12×8

12×80

c) 32×3

32×30

d) 7×9

7×90

e) 21×4

21×40

f) 48×3

48×30

How did you work out your answers?

2 Fill in the missing numbers.

a)

			4	3	
	x		1	3	
		1	2	9	
		4	3	0	

(43×3)

(43×10)

c)

	x				
		1	0	5	
		4	2	0	

(21×5)

(21×20)

b)

			2	1	
	x		1	6	
		1	2	6	
		2	1	0	

$(\square \times \square)$

$(\square \times \square)$

- 2 a) Complete the divisions.

Use place value counters to help you.

	3	7	5	9	5		

	4	8	5	6	7		

	5	6	5	6	2		

	3	3	9	3	5		

- b) Write $<$, $>$ or $=$ to complete the statements.

$$7,595 \div 3 \quad \bigcirc \quad 8,567 \div 4$$

$$6,562 \div 5 \quad \bigcirc \quad 3,935 \div 3$$

- 3 Write the calculations in the correct column of the table.

$$5,066 \div 4$$

$$9,513 \div 4$$

$$1,234 \div 4$$

$$6,562 \div 4$$

$$6,563 \div 4$$

$$9,515 \div 4$$

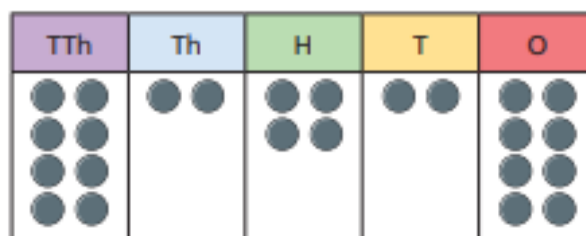
Remainder of 1	Remainder of 2	Remainder of 3	Remainder of 4

Are any columns empty? Talk to a partner about why this has happened.

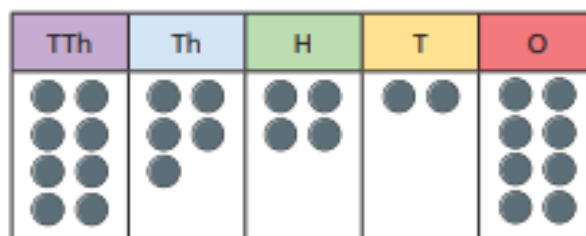
Compare and order numbers to 100,000

1 Rosie and Jack have each made a number.

Rosie's number



Jack's number



- Who has made the greatest number? How do you know?
- Draw counters on a place value chart to show a number that is greater than both Rosie's and Jack's.

2 Use 5 counters to make four different numbers on a place value chart.

- Write your numbers.
- Write your numbers in order from smallest to greatest.

3 Circle the greatest number in each pair.

- | | | | |
|-----------|-------|-----------|--------|
| a) 10,000 | 1,000 | d) 5,400 | 4,500 |
| b) 2,300 | 3,200 | e) 56,000 | 6,500 |
| c) 34,975 | 9,345 | f) 9,999 | 99,999 |

4 Write the numbers in order starting with the smallest.

- | | | | | |
|----------|-----|-----|-----|--------|
| a) 9,000 | 908 | 972 | 99 | 90,000 |
| b) 700 | 72 | 576 | 907 | 27 |