

Maths

6.1.21



Mental & Oral Starter

- Let's warm up by using our counting stick to count up in the 6x tables!
- Are you ready!?

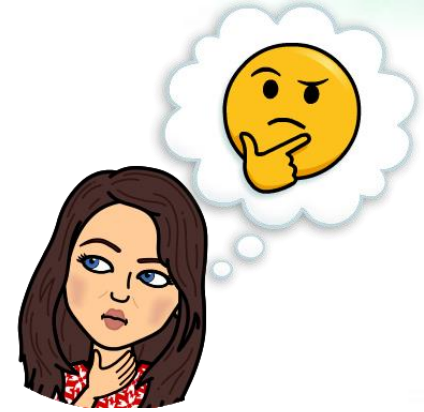


WALT: Multiply and divide by 6

S2S: I can

- Fluently recall times table facts for the 6 times table
- Fluently recall division facts for the 6 times table
- Explain the relationship between the 3 times table and the 6 times table

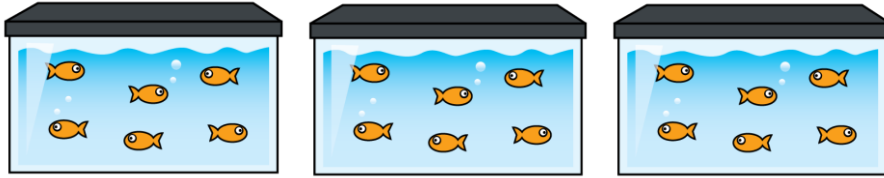




Let's Learn



What do you see?



How can we write this as repeated addition?

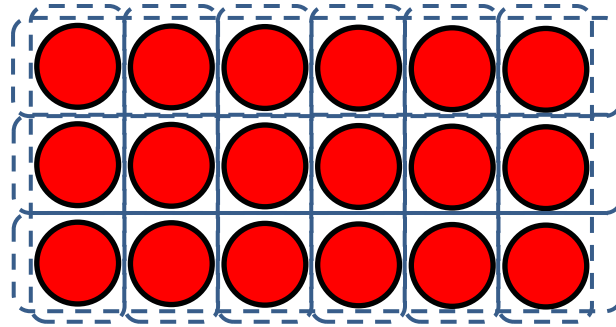
$$6 + 6 + 6 = 18$$

How can we represent this as a multiplication calculation?

$$6 \times 3 = 18 \text{ or } 3 \times 6 = 18$$



Let's use our arrays to create a fact family:



$$3 \times 6 = 18$$

$$6 \times 3 = 18$$

$$18 \text{ divided by } 3 = 6$$

$$18 \text{ divided by } 6 = 3$$



Let's look at the 3 times table and the 6 times table,
what do you notice?

3	6	9	12	15	18	21	24	27	30	33	36
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6	12	18	24	30	36	42	48	54	60	66	72
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$$3 \times 3 = 9$$

$$8 \times 3 = 24$$

$$3 \times 6 = 18$$

$$8 \times 6 = 48$$




Independent Practice





Complete today's worksheet:

6 times-table and division facts

1 Write the multiplication fact to work out how many there are in total.

a) 
 $\square \times \square = \square$

b) 
 $\square \times \square = \square$

2 
 Complete the facts represented by the array.
 $\square \times \square = \square$
 $\square \times \square = \square$
 $\square \div \square = \square$
 $\square \div \square = \square$

3 Fill in the gaps.

3 times-table

$0 \times 3 = \square$
 $1 \times 3 = \square$
 $2 \times 3 = \square$
 $3 \times 3 = \square$
 $4 \times 3 = \square$
 $5 \times 3 = \square$
 $6 \times 3 = \square$

6 times-table

$0 \times 6 = \square$
 $1 \times 6 = \square$
 $2 \times 6 = \square$
 $3 \times 6 = \square$
 $4 \times 6 = \square$
 $5 \times 6 = \square$
 $6 \times 6 = \square$

What patterns can you see?
 Talk about it with a partner.

4 Complete the number tracks.

$30 \quad 36 \quad \square \quad \square \quad \square \quad 60 \quad 66 \quad \square$
 $36 \quad 30 \quad 24 \quad \square \quad \square \quad \square \quad \square$

5 Complete the calculations.

a) $3 \times 6 = \square$
 b) $2 \times \square = 12$
 c) $6 \times 4 = \square$
 d) $\square \div 6 = 1$
 e) $11 \times 6 = \square$
 f) $\square \times 6 = 30$

g) $6 \times 6 = \square$
 h) $\square \div 6 = 7$
 i) $6 \times \square = 48$
 j) $\square \div 6 = 11$
 k) $10 \times 6 = \square$
 l) $\square \times 3 = 30$

6 Colour the multiples of 6

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80

Use the grid to complete the calculations.
 $72 \div 6 = \square$
 $78 \div 6 = \square$

7 Sort the number cards into the diagram.

18 15 36 16 20 6 72 63

	Multiples of 6	Not multiples of 6
Even numbers		
Odd numbers		

Are any of the boxes empty?
 Compare answers with a partner.

8 Jack is thinking of two whole numbers.
 The sum of the numbers is 13
 The difference between the numbers is 1
 What is the product of the numbers?
 The product of the numbers is \square



Self-Assessment

- Have you been successful today?
- How do you know?

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