Maths

8.1.21

Mental & Oral Starter

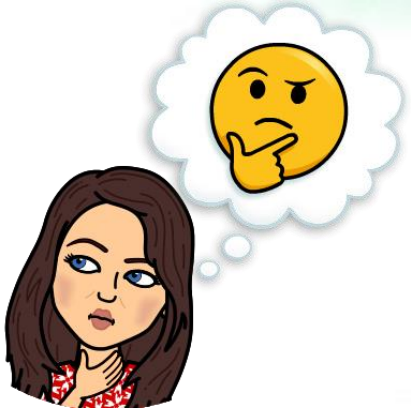
- Let's warm up by using our counting stick to count up in the 9x tables!

- Are you ready!?

WALT: Multiply and divide by 9

S2S: **I can**

- Learn strategies to support my recall of the 9 times table
- Fluently recall multiplication facts for the 9 times table
- Fluently recall division facts for the 9 times table



Let’s Learn

9 Times Table Trick!

- Watch this video to learn a handy trick to help you with your 9 times table:

- https://www.youtube.com/watch?v=wCpyag9XLgI

9	18	27	36	45	54	63	72	81	90	99	108	

+ 10
19
– 1
+ 10
46
– 1
+ 10
109
– 1

9
18
27
36
45
54
63
72
81
90

Have a think

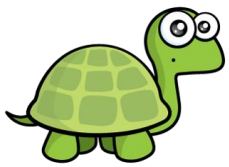
What patterns do you notice?

Ones decrease by 1

Tens increase by 1

Why is this the case?

So to find the next multiple of 9 I can add 10 and subtract 1

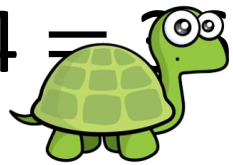


3	6	9	12	15	18	21	24	27	30	33	36

× 3

9	18	27	36	45	54	63	72	81	90	99	108

$3 \times 4 = 12$

$9 \times 4 =$ 

So if I know my 3 times-table I can multiply that by 3

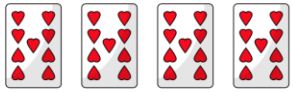
Independent Practice

Complete today's worksheet:

9 times-table and division facts

Rose Maths

1 How many hearts are there in total?
Complete the multiplication fact.



☐ × ☐ = ☐

2 Colour all the multiples of 9

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
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

What pattern do you notice?

Use the 100 square to complete these calculations.

72 ÷ 9 = ☐ 27 ÷ 9 = ☐

3 Complete the calculations.

a) 3 × 9 = ☐ g) 6 × 9 = ☐

b) ☐ ÷ 9 = 12 h) 9 × ☐ = 18

c) 9 × 4 = ☐ i) 9 × ☐ = 72

d) ☐ ÷ 9 = 1 j) ☐ ÷ 9 = 11

e) 11 × 9 = ☐ k) ☐ × 9 = 45

f) 10 × 9 = ☐ l) 20 × 9 = ☐

4 Complete the number tracks.

0	9	18				54		

108	99			72			45	36

5 These numbers are all multiples of 9

45	54	18	108

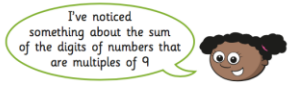
a) Show that the sum of the digits of each number is the same.

b) These numbers are also multiples of 9

198	657	891	999

What is the sum of the digits of each number?

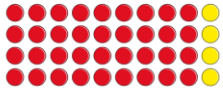
c)



What do you think Whitney has noticed?

d) 7,59_ is a multiple of 9
What is the missing digit? ☐

6 Jack is making arrays.



a) Use the arrays to complete the multiplications.

1 × 10 = ☐ 1 × 9 = ☐

2 × 10 = ☐ 2 × 9 = ☐

3 × 10 = ☐ 3 × 9 = ☐

4 × 10 = ☐ 4 × 9 = ☐

b) Write steps for a partner to explain how you can use the 10 times-table to multiply by 9

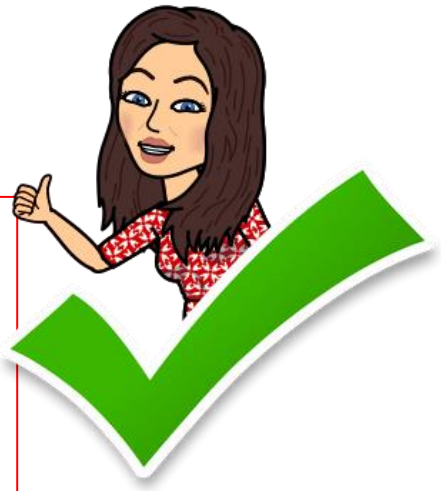
c) Use your steps to work out these multiplications.

19 × 9 = ☐ 72 × 9 = ☐

Self-Assessment

- Have you been successful today?

- How do you know?



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