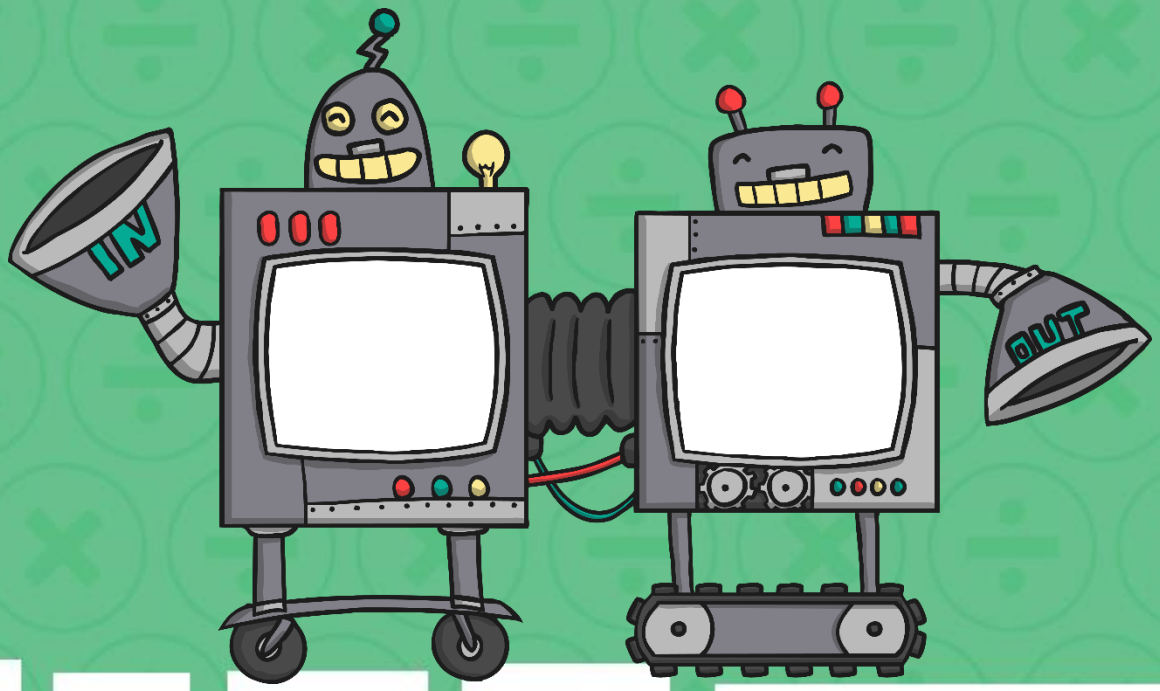
Maths

Multiplication and Division

Multiplication Machines



Aim

- I can multiply three numbers.

Success Criteria

- I can begin by multiplying two of the numbers together.
- I can multiply the product of these two numbers by the third number to find the answer.
- I can see that multiplication can be done in any order.

Missing Pieces

×	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	?	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	?	60
6	6	12	18	24	30	?	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	?	24	32	40	48	?	64	72	80	88	96
9	9	18	27	36	45	?	63	72	81	90	99	?
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	?	84	96	108	120	132	144

Can you work out what the missing squares in this multiplication square should be? Which numbers are hidden?

Click the squares to reveal the numbers underneath.

On the next slide, can you fill in the 13× and 14× tables?

×	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	1	2	3	4	5	6	7	8	9	10	11	12		
2	2	4	6	8	10	12	14	16	18	20	22	24		
3	3	6	9	12	15	18	21	24	27	30	33	36		
4	4	8	12	16	20	24	28	32	36	40	44	48		
5	5	10	15	20	25	30	35	40	45	50	55	60		
6	6	12	18	24	30	36	42	48	54	60	66	72		
7	7	14	21	28	35	42	49	56	63	70	77	84		
8	8	16	24	32	40	48	56	64	72	80	88	96		
9	9	18	27	36	45	54	63	72	81	90	99	108		
10	10	20	30	40	50	60	70	80	90	100	110	120		
11	11	22	33	44	55	66	77	88	99	110	121	132		
12	12	24	36	48	60	72	84	96	108	120	132	144		
13														
14														

Multiplication Machines

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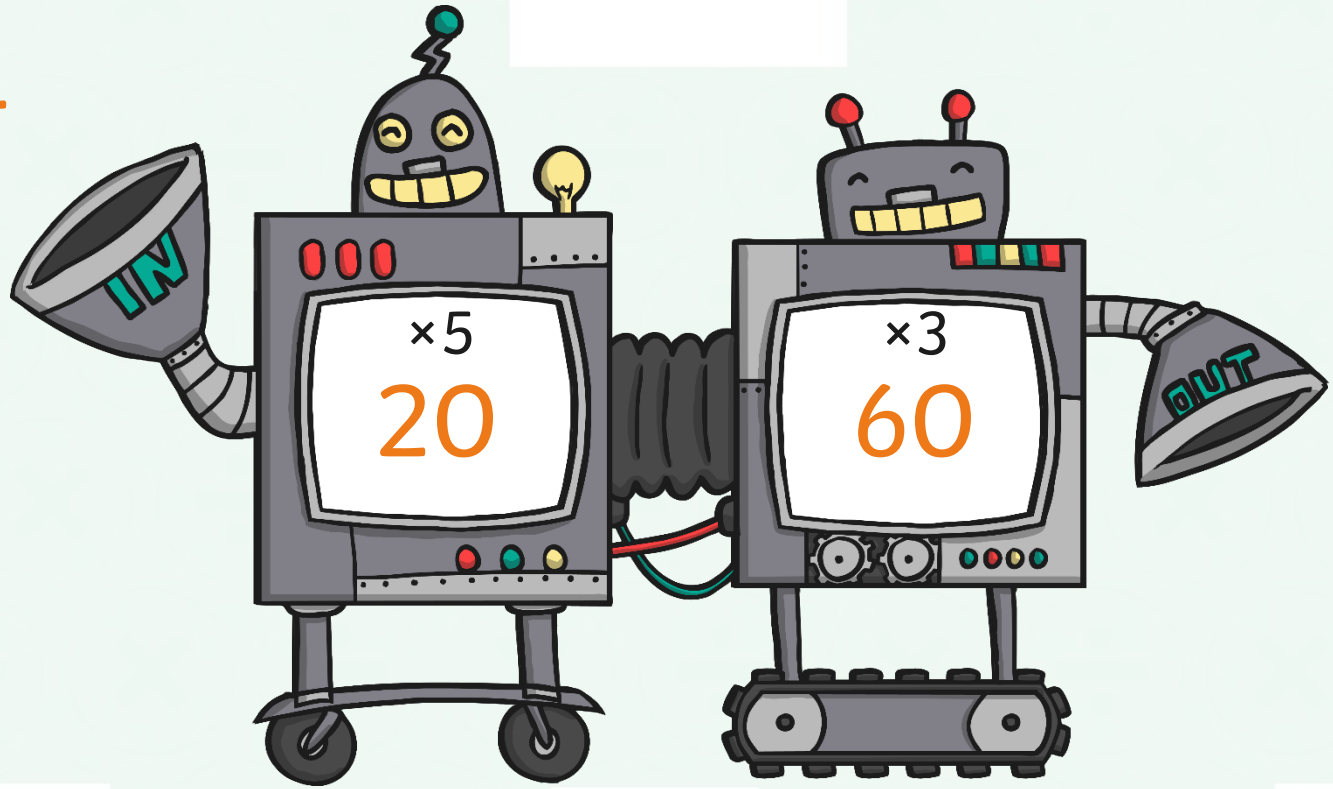

Multiplication Machines

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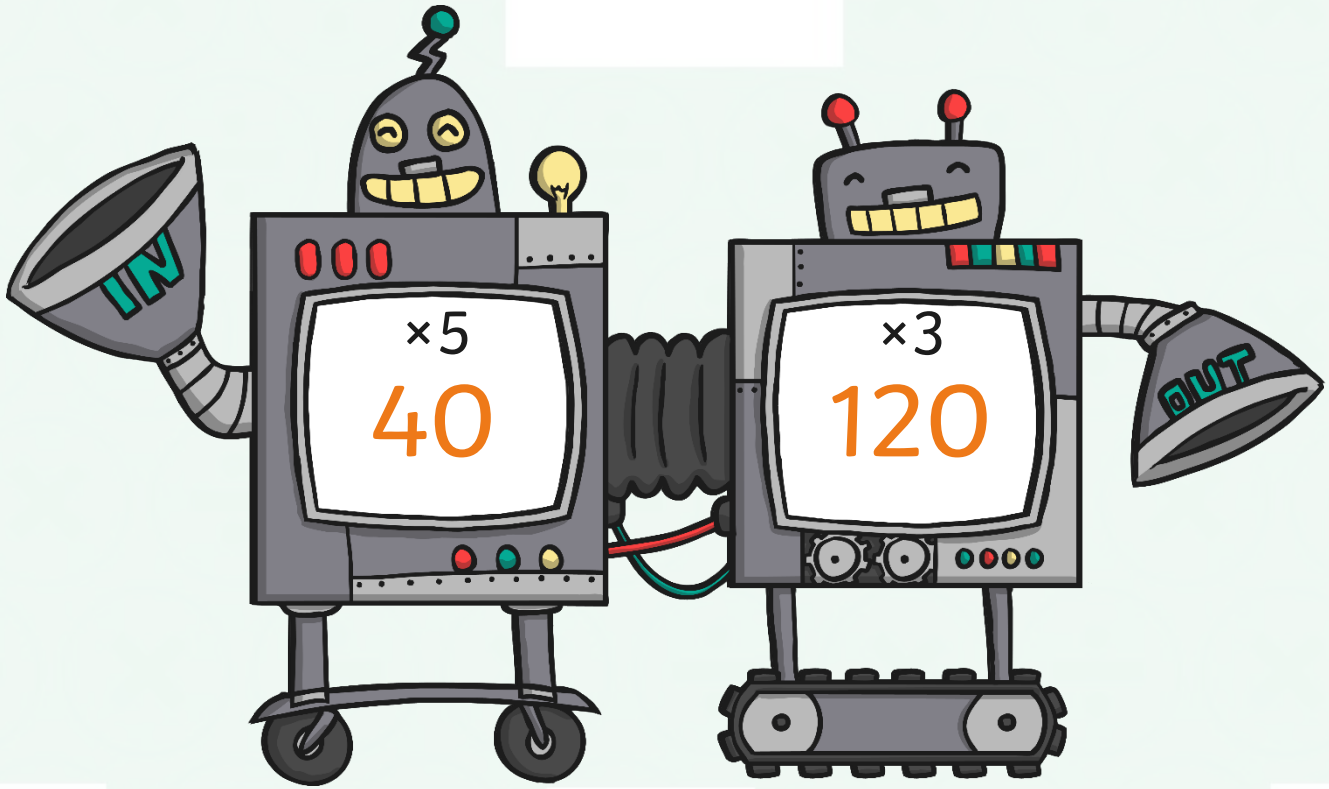
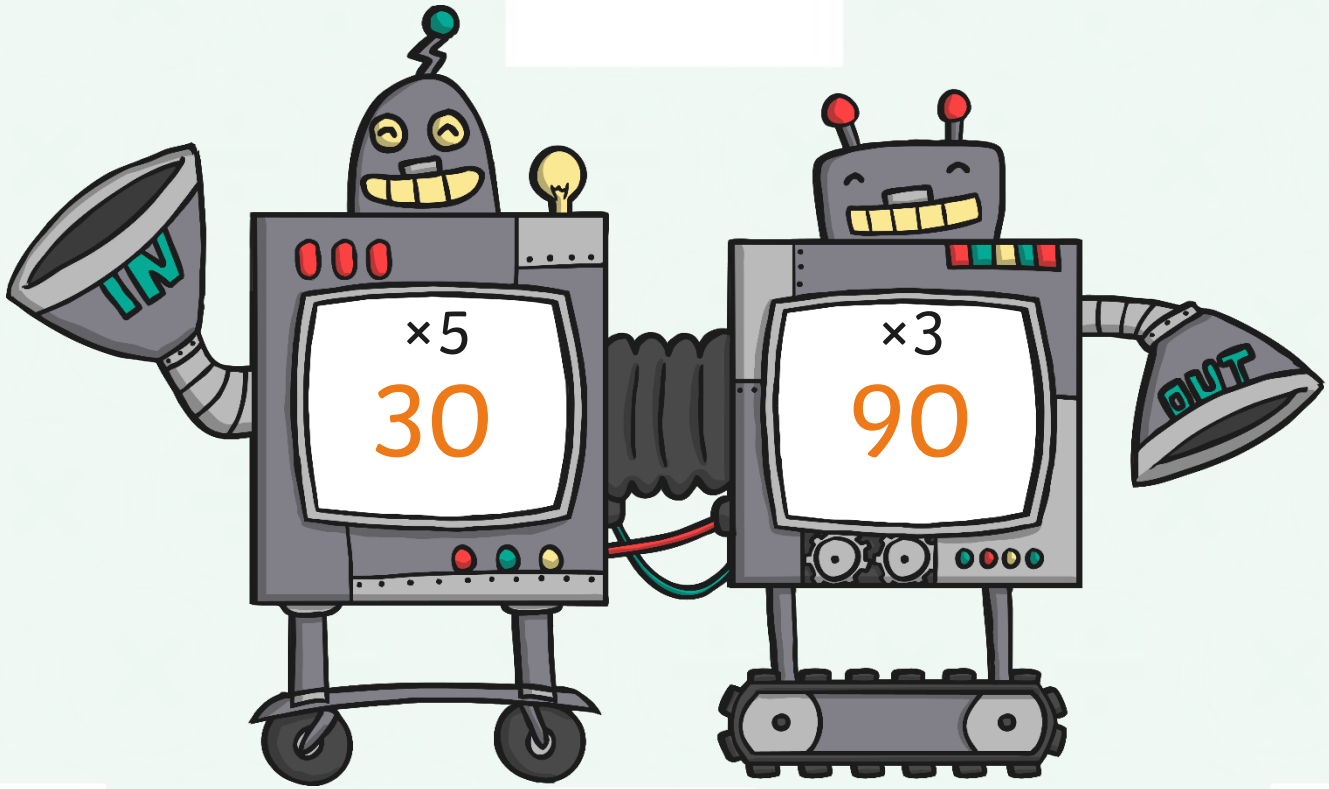


Multiplication Machines

6



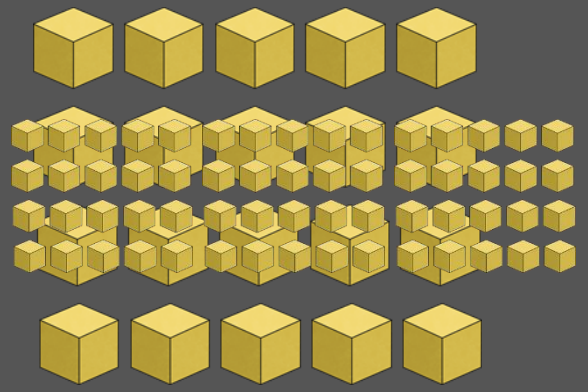
Inside the Machine

4 × 5 × 3 = 60

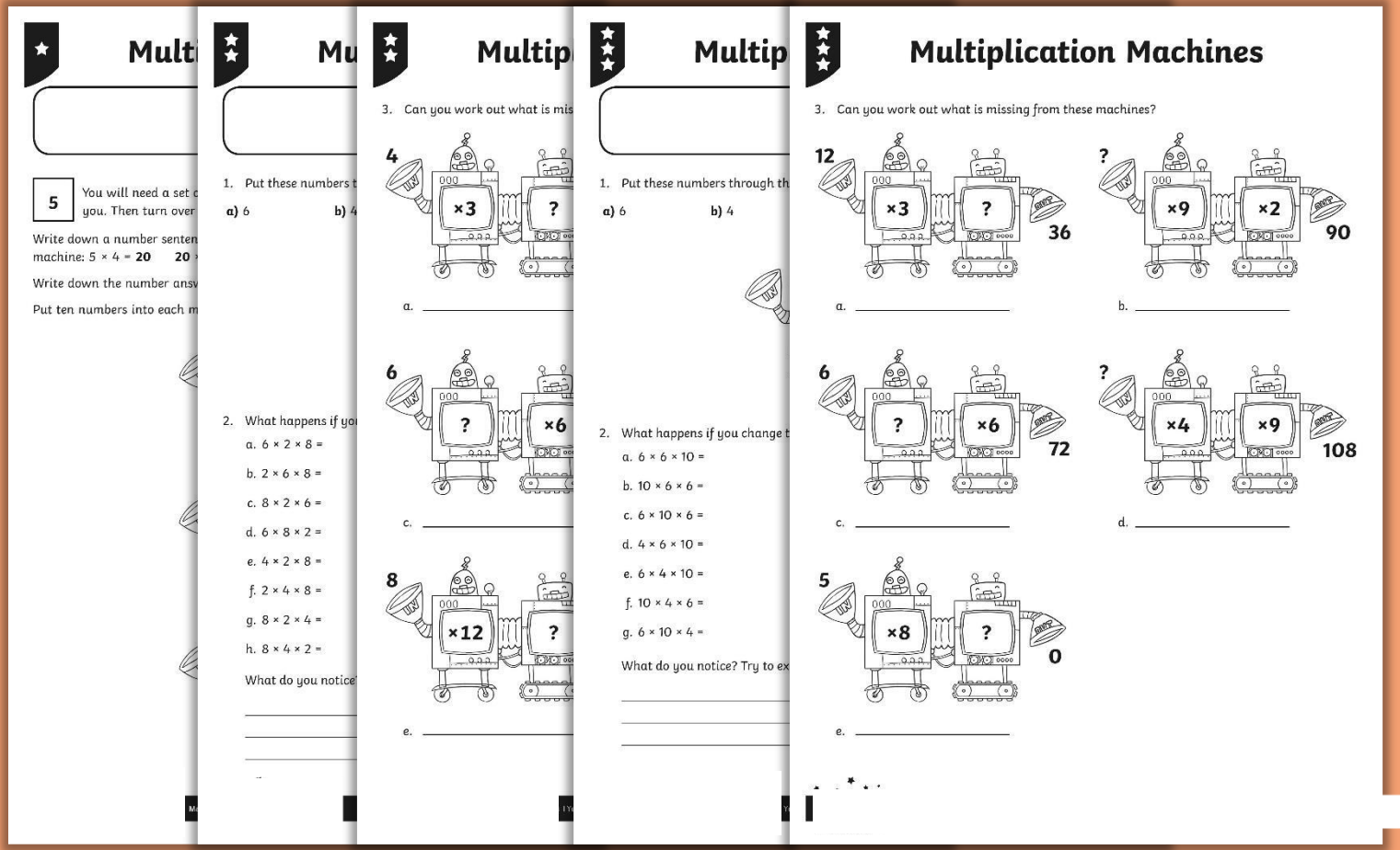
What is happening inside the machine?

Step 2: 20 × 3 = 60

Multiply the **product** of the first two numbers by the third number.



Multiplication Machines



Multiplication Machines

3. Can you work out what is missing from these machines?

a. _____

b. _____

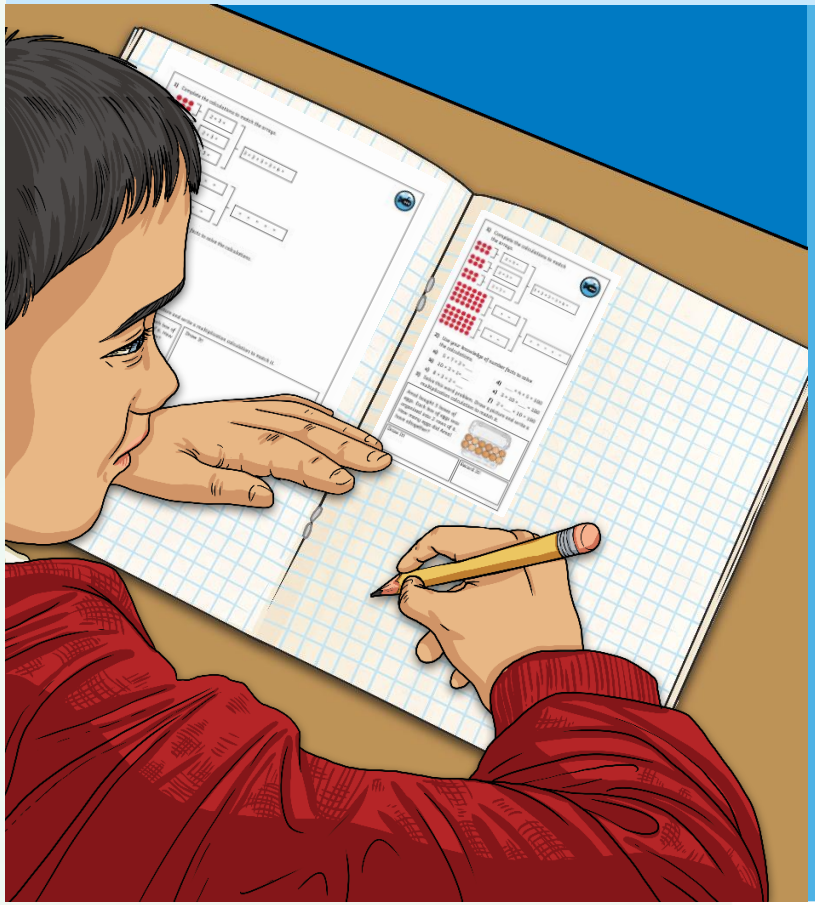
c. _____

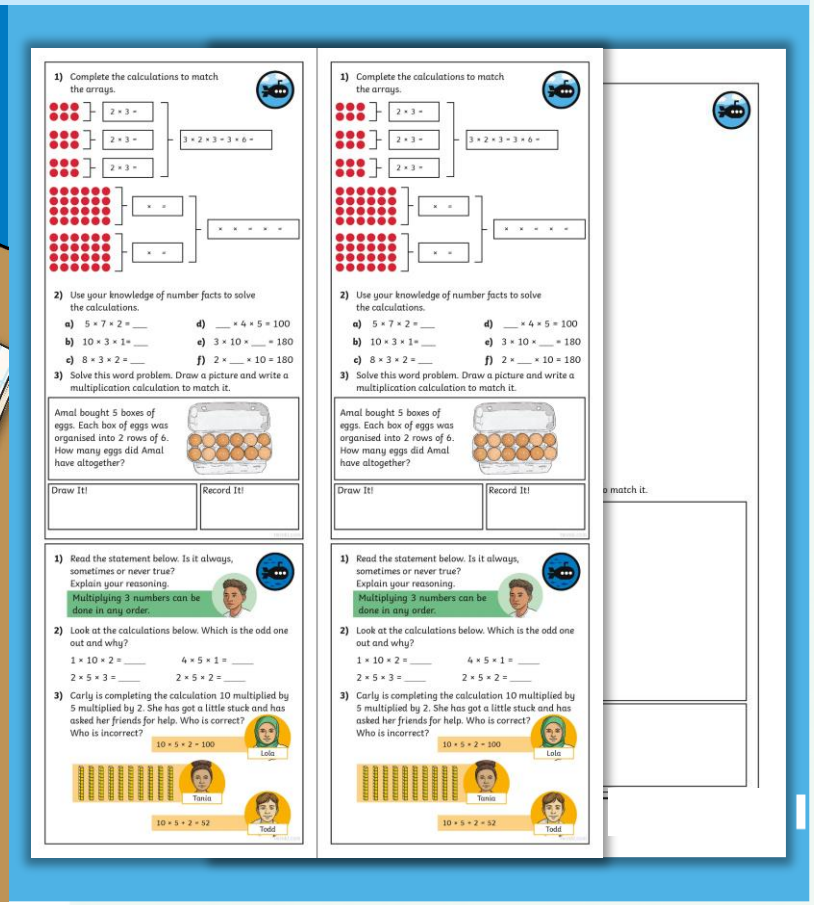
d. _____

e. _____

Diving into Mastery

Dive in by completing your own activity!



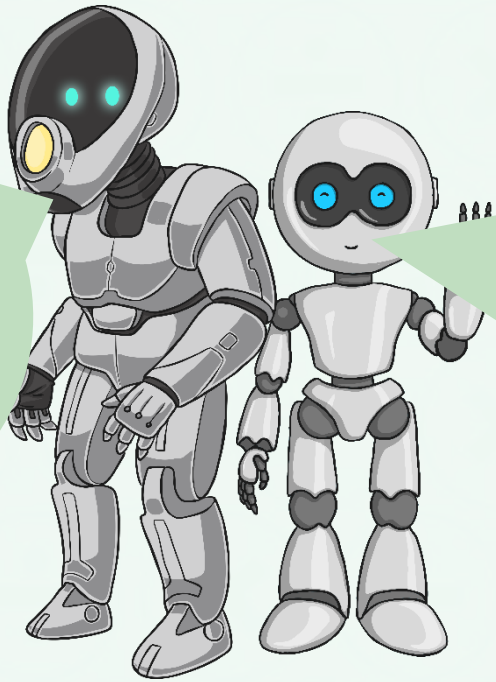


The Wrong End

Whole Class

Does the order of calculation matter when multiplying three numbers?

It doesn't matter which order you do multiplication questions in, you will always get the same answer!



You can't just put the numbers in the wrong end! You won't get the right answer. Multiplication questions need to be worked out from left to right, in order, or you'll get them wrong.

Who is correct? Give examples to support your ideas.

Aim

- I can multiply three numbers.

Success Criteria

- I can begin by multiplying two of the numbers together.
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