Drake Class
Year 5 Maths Home Learning Activities
Week beginning Monday 22/06/20

Multiplication

We have covered multiplication before – earlier in the year – but, again, I thought that it would be useful to revisit some of the strategies we use to calculate answers.

Use this week to practise your multiplication tables every day – choose one to focus on each day, write them out, look for patterns see how quickly you can write them/say them, write them in a random order, play Hit the Button, get someone to quiz you.

https://www.topmarks.co.uk/maths-games/hit-the-button

I will add a video talking through the steps of how to complete long multiplication. If you need any more help, please put a comment into Seesaw and I can respond to you individually.

Alternatively there is also this one: https://www.khanacademy.org/math/arithmetic/arith-review-multiply-divide/arith-review-multi-digit-mult/v/multiplication-6-multiple-digit-numbers

Step 1: Using doubling to solve decimal multiplication

Follow the Oak Academy Session: https://classroom.thenational.academy/lessons/to-use-a-range-of-multiplication-strategies

If you haven't used any of these sessions before, I would really like to know your thoughts on using them more frequently – so add a comment on your work. Please use the session to mark your own work and make corrections where necessary.

Step 2: Short Multiplication:

Complete the calculation.

Thousands	Hundreds	Tens	Ones
1000		10 10	1 1 1
1000		10 10	1 1 1
1000		10 10	1 1 1

	Th	H	T	O
	1	0	2	3
×				3

Write the multiplication calculation represented and find the answer.

Thousands	Hundreds	Tens	Ones
1000 1000	100		1 1 1 1 1 1
1000 1000	100		1 1 1 1 1 1

Remember if there are ten or more counters in a column, you need to make an exchange.

Annie earns £1,325 per week.
How much would he earn in 4 weeks?

Thousands	Hundreds	Tens	Ones
1000	100 100 100	10 10	1 1 1 1 1
1000	100 100 100	10 10	1 1 1 1 1
1000	100 100 100	10 10	1 1 1 1 1
1000	100 100 100	10 10	1 1 1 1 1

	Th	H	T	O
	1	3	2	5
×				4

EXT:

Alex calculated 1,432 × 4

Here is her answer.

	Th	H	T	O
	1	4	3	2
×				4
	4	16	12	8

1,432 × 4 = 416,128

Can you explain what Alex has done wrong?

Step 3: Long Multiplication:

Complete the calculation to work out 23 × 14

		2	3	
×		1	4	
		9 (1)	2	(23 × 4)
	2	3	0	(23 × 10)

Use this method to calculate:

34 × 26 58 × 15 72 × 35

Complete to solve the calculation.

		4	6	
×		2	7	
	3	2 (4)	2	(__ × __)
	9 (1)	2	0	(__ × __)

Use this method to calculate:

27 × 39 46 × 55 94 × 49

Calculate:

38 × 12 39 × 12 38 × 11

What's the same? What's different?

Amir has multiplied 47 by 36

		4	7
×		3	6
	2	8 (4)	2
	1	4 (2)	1
	3	2	3

Alex says,

Amir is wrong because the answer should be 1,692 not 323

Who is correct?
What mistake has been made?

Step 4: Long Multiplication:

Complete:

		1	3	2	
×			1	4	
		5	2 (1)	8	(132 × 4)
	1	3	2	0	(132 × 10)

Use this method to calculate:

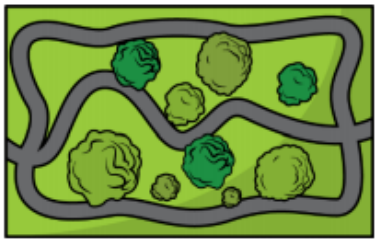
264 × 14 264 × 28

What do you notice about your answers?

Calculate:

637 × 24 573 × 28 573 × 82

A playground is 128 yards by 73 yards.



Calculate the area of the playground.

Step 5: Problem solving with multiplication

Farmer Ron has a field that measures 53 m long and 25 m wide.

Farmer Annie has a field that measures 52 m long and 26 m wide.

Dora thinks that they will have the same area because the numbers have only changed by one digit each.

Do you agree? Prove it.

Here are examples of Dexter's maths work.

			9	8	7
×				7	6
		5	5 9	4 2	2
		6	6 9	4 0	9
	1	1 2	8	1 3	1

			3	2	4
×				7	8
		2	1 5	3 9	2
	2	1 2	2 6	8	0
		3	2	7	2

He has made a mistake in each question.

Can you spot it and explain why it's wrong?

Correct each calculation.

22 × 111 = 2442

23 × 111 = 2553

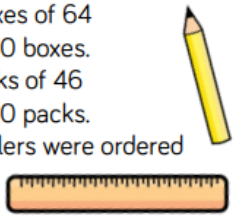
24 × 111 = 2664

What do you think the answer to 25 × 111 will be?

What do you notice?

Does this always work?

Pencils come in boxes of 64
A school bought 270 boxes.
Rulers come in packs of 46
A school bought 720 packs.
How many more rulers were ordered than pencils?



Extension:

Use the method shown to calculate 2,456 × 34

		3	2	5	0	
×				2	6	
	1	9 1	5 3	0	0	(3,250 × 6)
	6	5 1	0	0	0	(3,250 × 20)
	8	4	5	0	0	

Calculate

3,282 × 32 | 7,132 × 21 | 9,708 × 38

> or = to make the statements correct.

4,458 × 56 ◯ 4,523 × 54

4,458 × 55 ◯ 4,523 × 54

4,458 × 55 ◯ 4,522 × 54

Teddy has spilt some paint on his calculation.

		2		6	9
×				2	
	2	6 2	5 9	7 5	2
	1 5	1 7	1 3		0
	1	1 0	1 3	3	2

What are the missing digits?

What do you notice?

EXTENSION:

I have also inclused a template sheet which you can write directly onto through Seesaw or you can print them out. There are 3 different levels – with the last level being a Year 6 standard (so don't feel like you need to do that one)

Additional areas to work on:

Play on Hit the Button - focus multiplication tables.

Work through the areas of an arithmetic paper (which can be found on the KS2 Maths Organiser on the school website) Look at the Calculation Policy on the school website under 'Curriculum' and then 'Maths' for help in how to support + - x and ÷
https://www.sampford-peverell-primary.devon.sch.uk/website/maths/459621