

Week beginning 28.9.20

Maths

This week we are looking at multiplication.

Please complete the lessons on the following link

<https://whiterosemaths.com/homelearning/year-6/week-4/>

Task A

1) You have 5 digits 1,2,3,4,5.

Use these to make a 4 digit multiplied by 1 digit calculation.

- 1) What is the largest product you can make?
- 2) What is the smallest product you can make?
- 3) Can you make an odd/even product?
- 4) Use a model to show your calculation

2)

Can you work out the missing numbers using the clues?

$$\begin{array}{r} \square \square \square \square \\ \times \quad \quad \quad \square 5 \\ \hline \square \square \square \square \square \end{array}$$

- The 4 digits being multiplied by 5 are consecutive numbers.
- The first 2 digits of the product are the same.
- The fourth and fifth digits of the answer add to make the third.

3)

Alex calculated $1,432 \times 4$

Here is her answer.

	Th	H	T	O
	1	4	3	2
x				4
	4	16	12	8

$$1,432 \times 4 = 416,128$$

Can you explain what Alex has done wrong?

Task B

- 1) Use area model to prove

True or false?

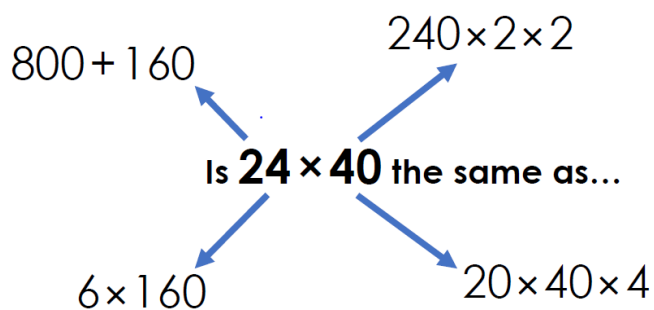
$$17 \times 13 = 15 \times 15$$

What do you notice?

Try other examples. Do you see a pattern?

- 2)

Is it the same?



Task C

- 1) Estimate and then calculate

$$637 \times 24 =$$

$$573 \times 28 =$$

$$573 \times 82 =$$

- 2)

I know... so...

$$25 \times 48 = \underline{\quad}$$

$$100 \times 48 = 4800$$

$$\underline{\quad} \times 48 = 4848$$

Task D

1) Use column multiplication and then use another method to solve

$$3,125 \times 15 =$$

$$5,123 \times 13 =$$

$$5,056 \times 14 =$$

2) Solve

A swimming team swim 1,235 lengths of a pool each day. How many lengths of the pool do they swim in 21 days?

The coach changes the training programme so the athletes train for 24 days. How many lengths will they swim now?

3)

True or False?

- $5,463 \times 18 = 18 \times 5,463$
- I can find the answer to $1,100 \times 28$ by calculating $1,100 \times 30$ and subtracting 2 lots of 1,100
- $702 \times 9 = 701 \times 10$

Task E

1)

2 3 4 5 7 8

Place the digits in the boxes to make the largest product.

×				

What is the largest product? Convince me

What is the smallest product? Convince me

What is the largest product you can make using consecutive numbers?

You can change 1 of the digits for a 0,1 or 9 which digit would you change to make a larger number? Why?

You can change 1 of the digits for a 0,1 or 9 which digit would you change to make a larger number? Why?

Write a word problem to go with 2 of your calculations

2)

	6	2		
×				8
			9	6

	5	1	3	7
×				
		5	4	1
			1	1

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

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