Use the method we learnt yesterday to answer these questions

12 x 12 =
32 x 15 =
19 x 27 =

Remember to include the remainders in your final answer.

Put the answers in ascending order.

RECALL

Work out the multiplications.

a) 142 × 31   b) 337 × 46   c) 214 × 53   d) 24 × 183

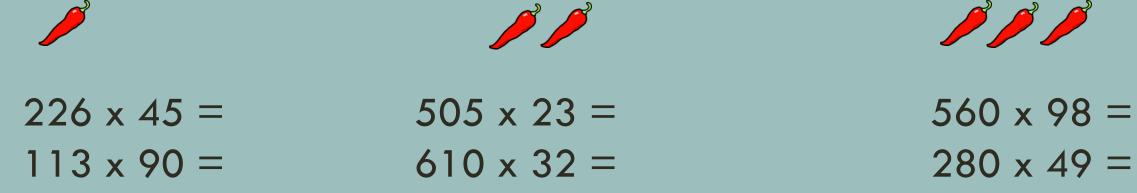Remember to include the remainders.

But all the answers in descending order.

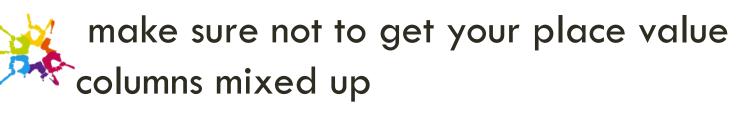LO: multiplying 3 digit by 2 digit numbers

Some will even answer questions out of context (estimating).

Some will spot patterns.

Most will answer word problems.

All will answer number problems.

LEARNING HABIT RESILIENCE.

Use the method you saw in guided practice to answer these following questions

226 x 45 =
113 x 90 =

505 x 23 =
610 x 32 =

560 x 98 =
280 x 49 =

make sure not to get your place value columns mixed up

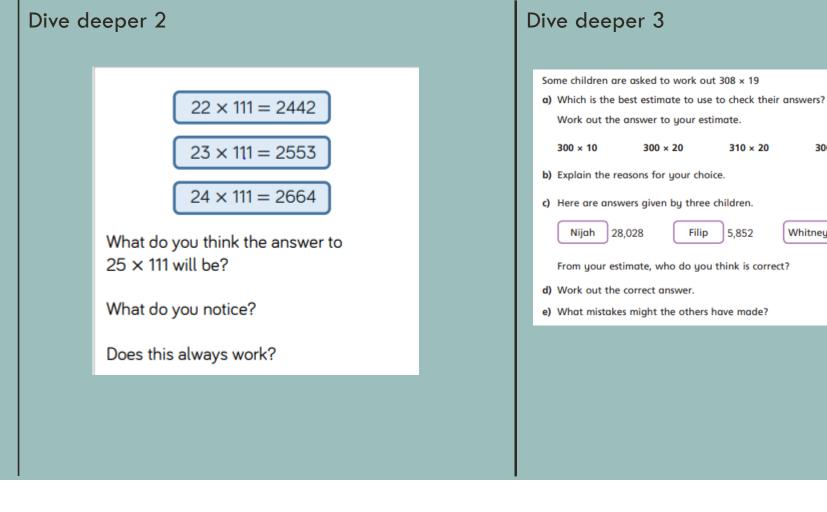Do you notice a pattern in each of the chillis?

Dive deeper 1

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?

A football pitch is 128 m long and 52 m wide.

a) What is the area of the pitch?

b) A field is 25,000 m².

   How many football pitches could fit in it?

Dive deeper 2

$22 \times 111 = 2442$

$23 \times 111 = 2553$

$24 \times 111 = 2664$

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

What do you notice?

Does this always work?

Dive deeper 3

Some children are asked to work out 308×19

a) Which is the best estimate to use to check their answers?

   Work out the answer to your estimate.

   300×10 300×20 310×20 300×19

b) Explain the reasons for your choice.

c) Here are answers given by three children.

   | Nijah | 28,028 | | Filip | 5,852 | | Whitney | 2,080 |

   From your estimate, who do you think is correct?

d) Work out the correct answer.

e) What mistakes might the others have made?

Look at the key information in each of the question

Which is the most difficult question? Explain why.

DIVE DEEPER

Dive deeper 1

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?

They have 17,280 pencils. They have 33,120 rulers. They have 15,840 more rulers.

A football pitch is 128 m long and 52 m wide.

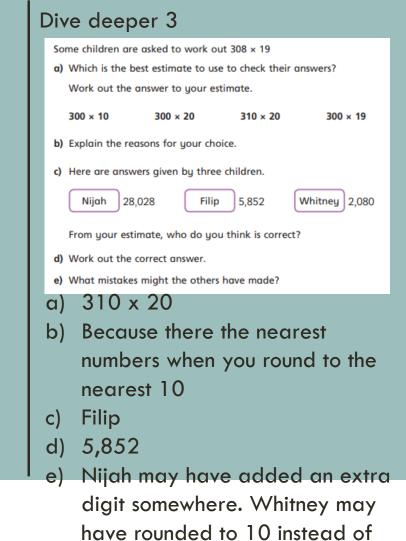a) What is the area of the pitch?

b) A field is 25,000 m².

   How many football pitches could fit in it?

a) 6,656 cm²
b) 3 pitches

Dive deeper 2

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?

The pattern stops at up to 28 × 111 because exchanges need to take place in the addition step.

Dive deeper 3

Some children are asked to work out 308 × 19

a) Which is the best estimate to use to check their answers?

   Work out the answer to your estimate.

   300 × 10   300 × 20   310 × 20   300 × 19

b) Explain the reasons for your choice.

c) Here are answers given by three children.

   Nijah 28,028   Filip 5,852   Whitney 2,080

   From your estimate, who do you think is correct?

d) Work out the correct answer.

e) What mistakes might the others have made?

a) 310 x 20
b) Because there the nearest numbers when you round to the nearest 10
c) Filip
d) 5,852
e) Nijah may have added an extra digit somewhere. Whitney may have rounded to 10 instead of 20

DIVE DEEPER

Look at the key information in each of the question

Which is the most difficult question? Explain why.