Parent maths workshop

March 2022

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What are we going to cover today?

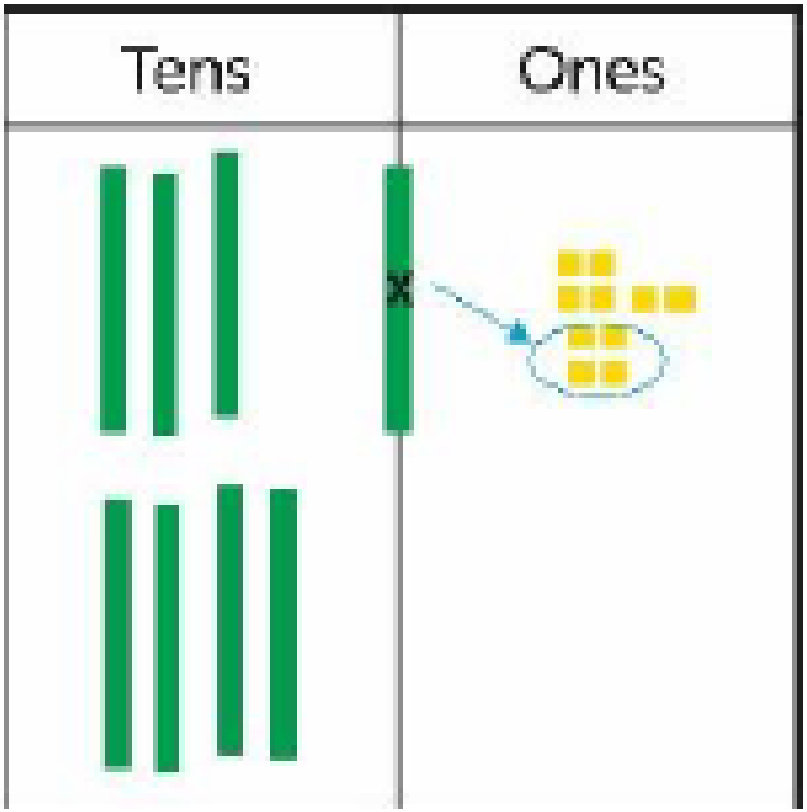
- How we teach maths at Hammond
- What this looks like in practice
- How calculation is taught
- How we teach number facts
- How we can help at home

Key principles of maths at Hammond

- Carefully sequenced curriculum – following what is known as a spiral model.
- Explicit instruction and guided practice – ping-pong teaching
- Use of representations to aid conceptual understanding
- Precise use of vocabulary and speaking frames
- Understanding over doing
- Over-practice
- Using and applying maths to be applicable in all areas of life

Subtraction – regrouping (exchange)
Year 3 Autumn Term

80 - 24



Speaking frame

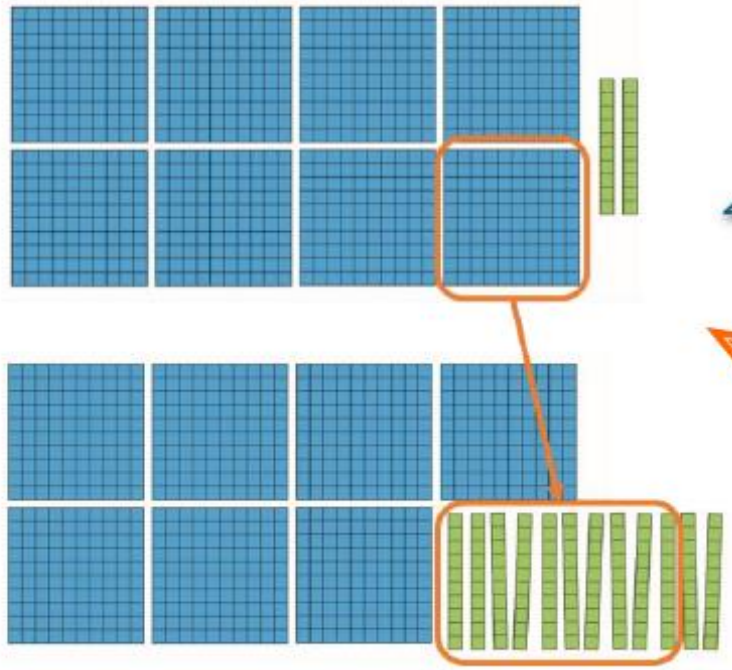
- I cannot subtract __ from __
- So I need to regroup.
- I am going to exchange __ ten for _____ ones
- Now I can do____

‘Play the Bankers Game’ in reverse (from 3LS1).

- For 2 and 4 players.
- Equipment: 0-9 dice, base-10 and a place value mat.
- Provide each team with 4, base-10 hundreds.
- The aim is to ‘spend’ as much as they can from their 4 hundreds.
- One pupil is the banker and responsible for the base-10 equipment.
- Pupils take it in turns to roll the dice and give to the banker the corresponding number of ‘ones’.
- They will need to ask the banker to regroup one of the hundreds into 10 tens and then 1 of the tens into 10 ones before the number can be ‘spent’.
- Repeat rolling the dice and giving to the banker the correct number of ones - regroup when necessary.
- After the time is up, the teacher can find out which group has spent the most and has the smallest number.

Show pupils the following calculation. Ensure pupils make the links between the pictorial representation and the calculation.

$$\begin{array}{r} 8\ 2\ 5 \\ -\ 2\ 4\ 1 \\ \hline \\ \hline \end{array}$$

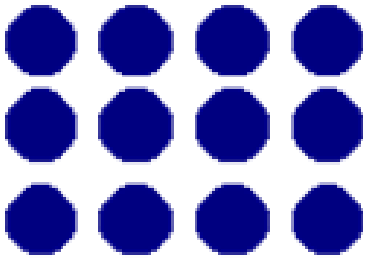


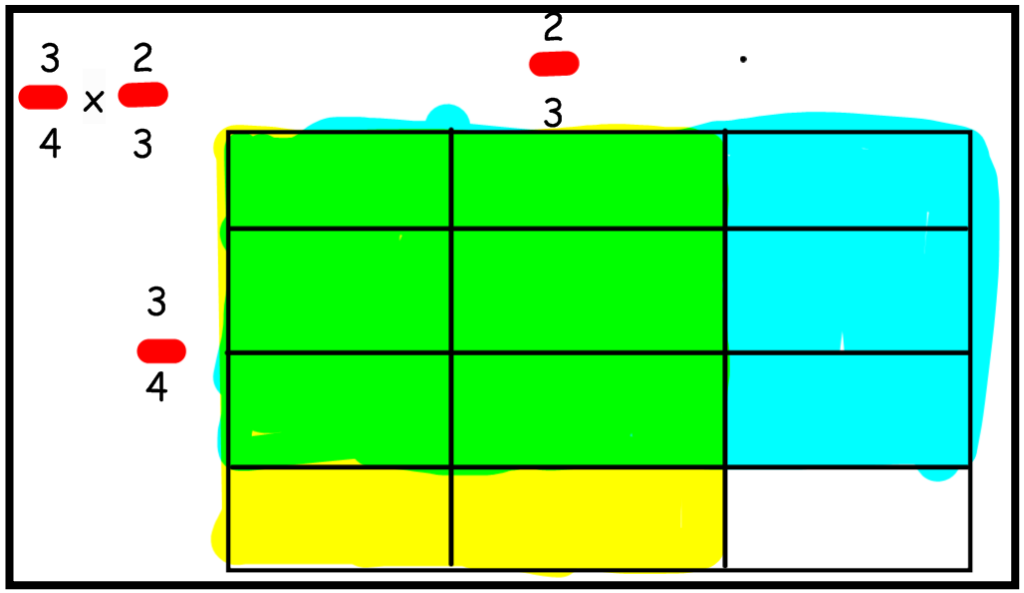
Where do you predict we'll have to regroup in this calculation? Can you explain why?

8 hundreds and 2 tens can be regrouped into 7 hundreds and 12 tens. I take the 4 tens from 12 tens. I have 8 tens left.

Calculation

Part	Part	Part	Part
Whole			





Bus stop (short division)

- Using concrete and then abstract representations
- Importance of consistent vocabulary
- Role of understanding during calculation
- Flexibility and fluency in approach
- Interconnectedness of mental calculation

Number facts

- Need for automaticity to reduce cognitive load
- Knowing vs working out
- Teaching and testing
- Cumulative process
- Using TTRs as a way of practising

7 times table

How can I help at home?

- Reassurance and support.
- Showing how you would do it
- Quizzing of times tables and number facts
- Money, time, measure and other 'practical' areas of maths