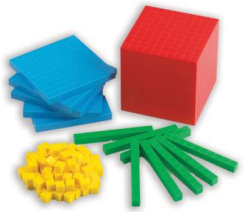
NORTH WESTMINSTER FEDERATION

Welcome to Year 3 and Year 4's Maths Parent Workshop

Miss Ghirmay

Thousands Th	Hundreds H	Tens T	Ones O
	100 100 100	10 10	1

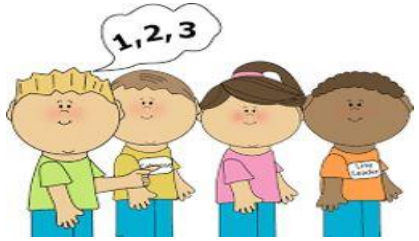


Parental Engagement

- Feedback from parents in previous years regarding:
  - methods used in school
  - supporting children with homework
  - using mathematical terminology

- Lesson observations followed by parent workshop

Counting



- Counting reinforced at the beginning of every lesson (e.g: 3 times table – 3 X 1 = 3, 3 X2 = 6... and revisiting counting in 10s – 97, 107, 117 etc)



- Visuals to support counting (number tracks, hundred square)

267	277	287	297	307	317	327

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

- Share ‘ISeeMaths’ website with resources for counting etc http://www.iseemaths.com/

National Curriculum

Number – addition and subtraction

Statutory requirements

Pupils should be taught to:

- add and subtract numbers mentally, including:
  - a three-digit number and ones
  - a three-digit number and tens
  - a three-digit number and hundreds
- add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction
- estimate the answer to a calculation and use inverse operations to check answers
- solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.

Number – addition and subtraction

Statutory requirements

Pupils should be taught to:

- add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- estimate and use inverse operations to check answers to a calculation
- solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.

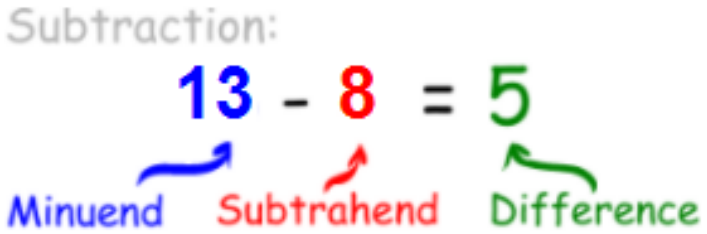
Maths Curriculum

- Emphasis on **representations** to help understand underlying mathematical structures



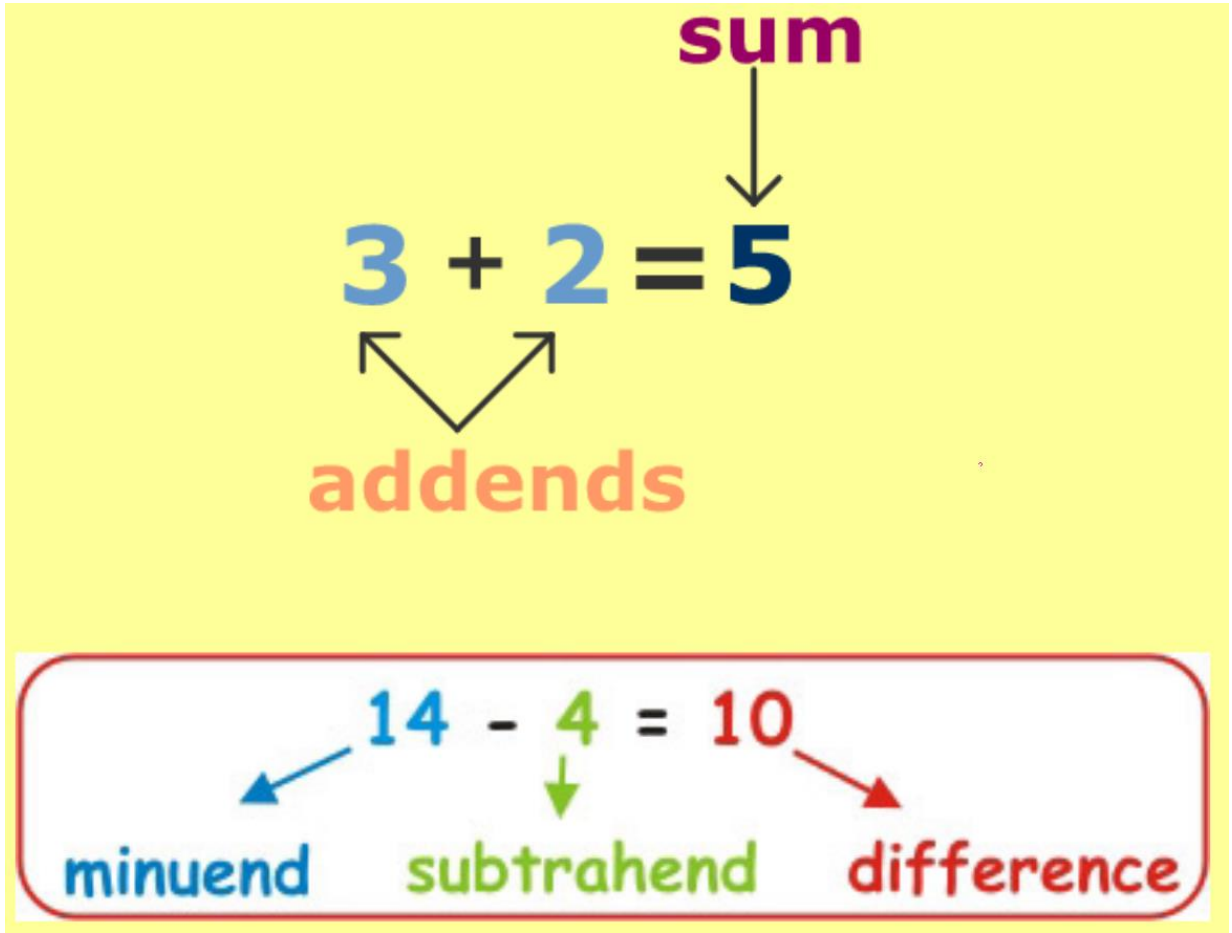
- **Reasoning** and problem-solving

- Precise mathematical **vocabulary**

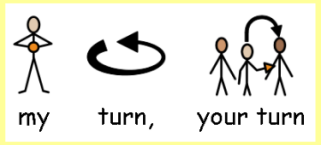


- Making **links** between known and unknown facts (If….then…)

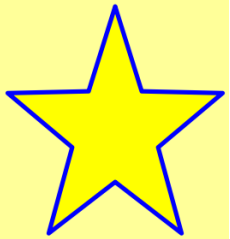
Mathematical Vocabulary



Star words



Number bond



Equation

Sum

Addend

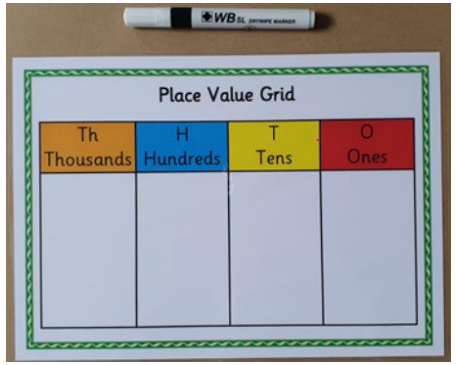
Subtrahend

Minuend

Difference

Resources and Visual Models

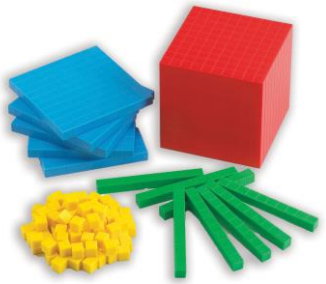
Children already use a number of visual models to help them see the underlying mathematical structures…



Place value grid



Place value counters



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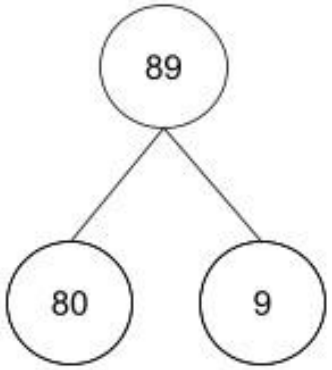


Part-whole model

Making Links

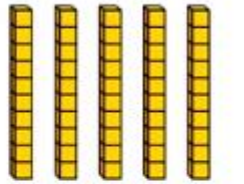
$5 - 2 =$ ☐

5 ones − 2 ones = _____



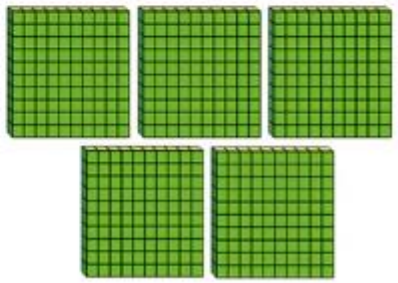
$50 - 20 =$ ☐

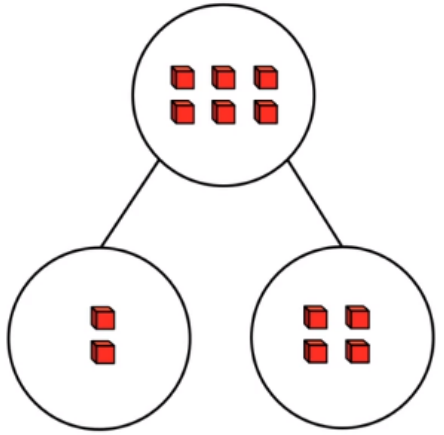
5 tens − 2 tens = _____



$500 - 200 =$ ☐

5 hundreds − 2 hundreds = _____



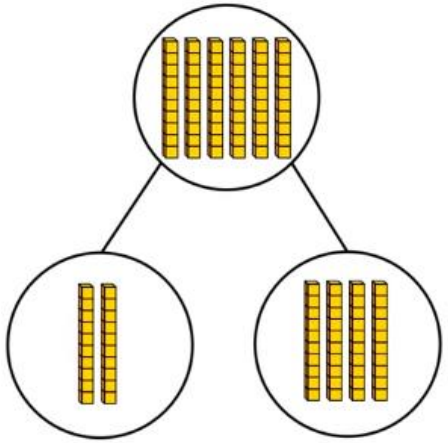


____ + ____ = ____

____ + ____ = ____

____ − ____ = ____

____ − ____ = ____



____ = ____ + ____

____ = ____ + ____

____ = ____ − ____

____ = ____ − ____

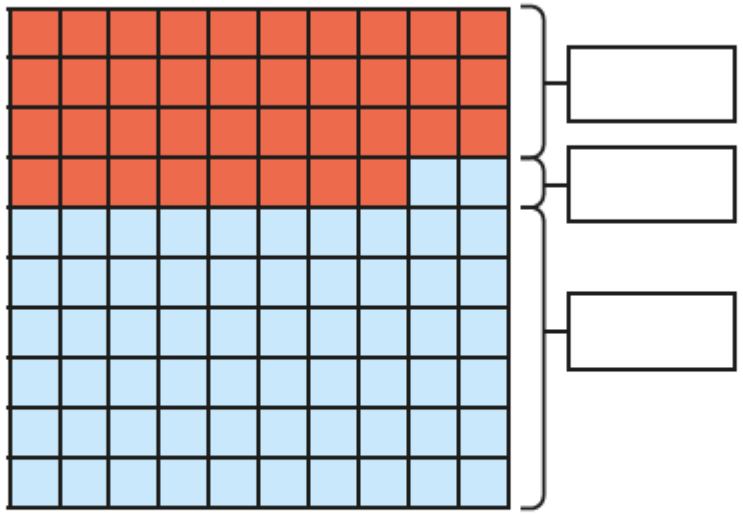
6 + 2 = 8, so 60 + 20 = ____

7 + 2 = 9, so 70 + 20 = ____

60 − 50 = 10, so 600 − 500 = ____

Depth

Fill in the totals for the hundred square.



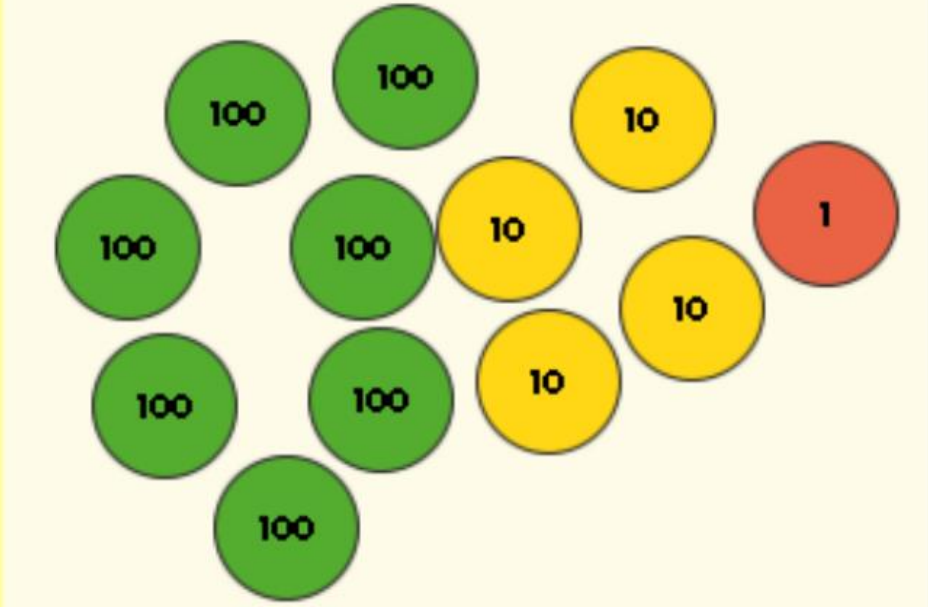
Use the hundred square to complete the number sentence.

38 + 62 = _____ + _____ + _____ = _____

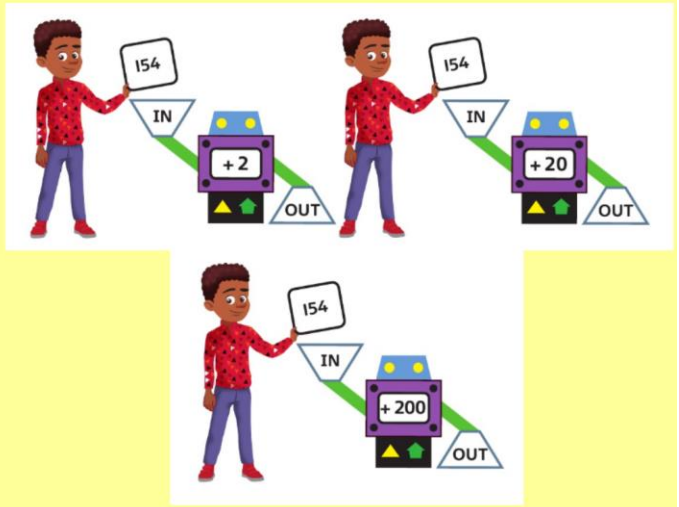
Place Value

741

What is the value of the 1?
What is the value of the 4?
What is the value of the 7?



Cherry class: Noticing patterns and using place value knowledge



Lee is putting a number into three function machines.
What is the same and what is different?

Lee's number is 154.
How will the number change when he puts it into each machine?

Thousands Th	Hundreds H	Tens T	Ones O
	100	10 10 10 10 10	1 1 1 1

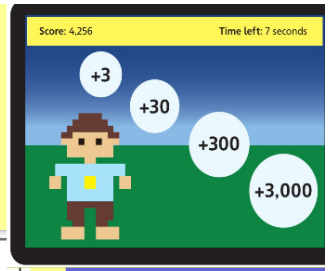
Max has scored 3,869 points.

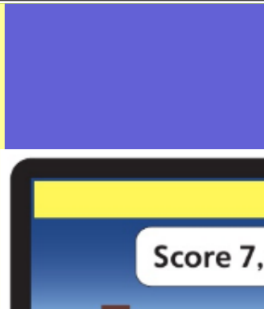
He hits a +5,000 bubble, then a –2,000 star.

What will his score be now?

Does it matter what order we do the calculation?

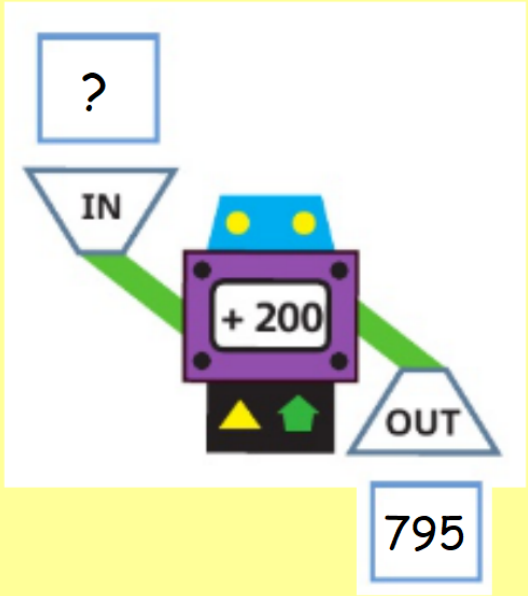
Thousands Th	Hundreds H	Tens T	Ones O
1,000 1,000 1,000	100 100 100 100 100 100 100 100	10 10 10 10 10 10	1 1 1 1 1 1 1 1 1

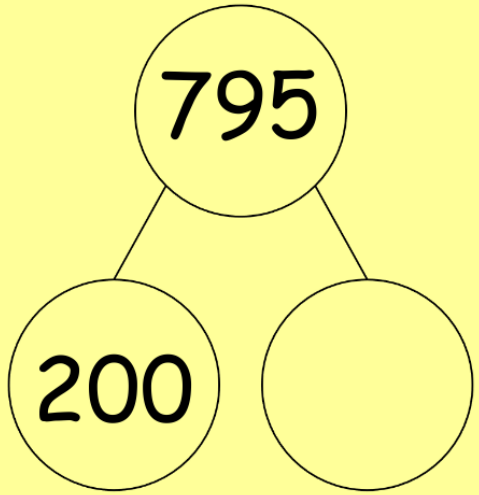




Challenging Children's Understanding

Miss Ruby puts a number into the +200 machine.
The output is 795.
What number did she start with?





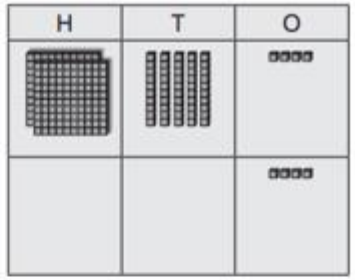
What calculation do we need to do to find the missing part?

Main task (pictorial and abstract)

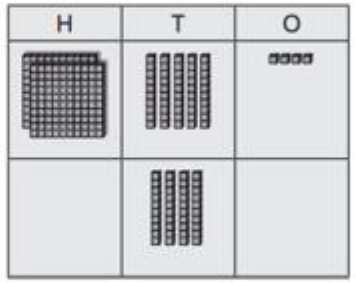


Year 3s add 1s, 10s and 100s

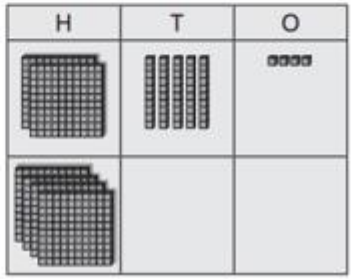
a) 254 + 4 = ☐



b) 254 + 40 = ☐



c) 254 + 400 = ☐



Use

Complete these calculations.

a) 345 + 200 = ☐

345 + 20 = ☐

345 + 2 = ☐

b) ☐ = 777 – 20

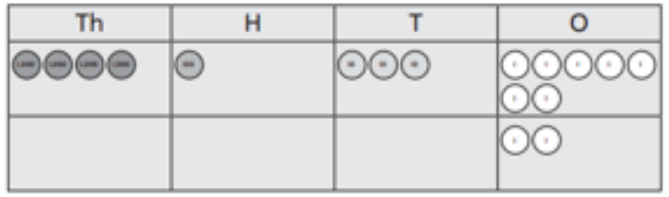
☐ = 777 – 2

777 = ☐ – 200

Practice

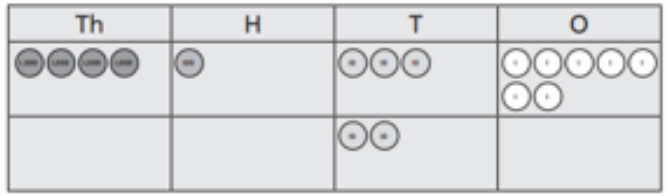
Complete these calculations.

a)



4,137 + 2 = ☐

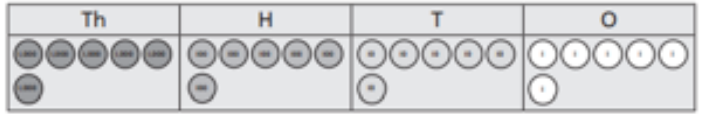
b)



4,137 + 20 = ☐

Use

Work out the missing numbers.



a) 6,666 + 2 = ☐

6,666 + 20 = ☐

2,000 + 6,666 = ☐

b) 6,666 – 200 = ☐

6,666 = ☐ – 200

6,666 – ☐ = 6,664

Apply

Complete these calculations.

a) 3,154 + 500 = ☐

b) 500 + 4,351 = ☐

c) 9,786 – 4,000 = ☐

d) ☐ = 7,968 – 400

e) ☐ + 1,000 = 2,134

f) ☐ + 4,000 = 4,521

g) 4,014 – 10 = ☐

h) 5,001 – ☐ = 1

Year 4s add 1s, 10s, 100s and 1000s

Magnolia Class



270 + 60 =



I will count up in 10s

There are 6 tens in 60

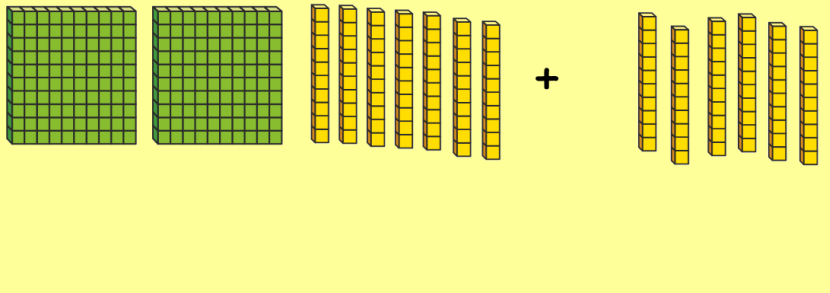
270	280	290	300	310	320	330

Show jumps of ten each time

270 + 60



I will use base 10 to help me



Exchanging 10 tens for 1 hundred

Sentence stems to help children articulate understanding

10 tens is equal to _____ hundreds

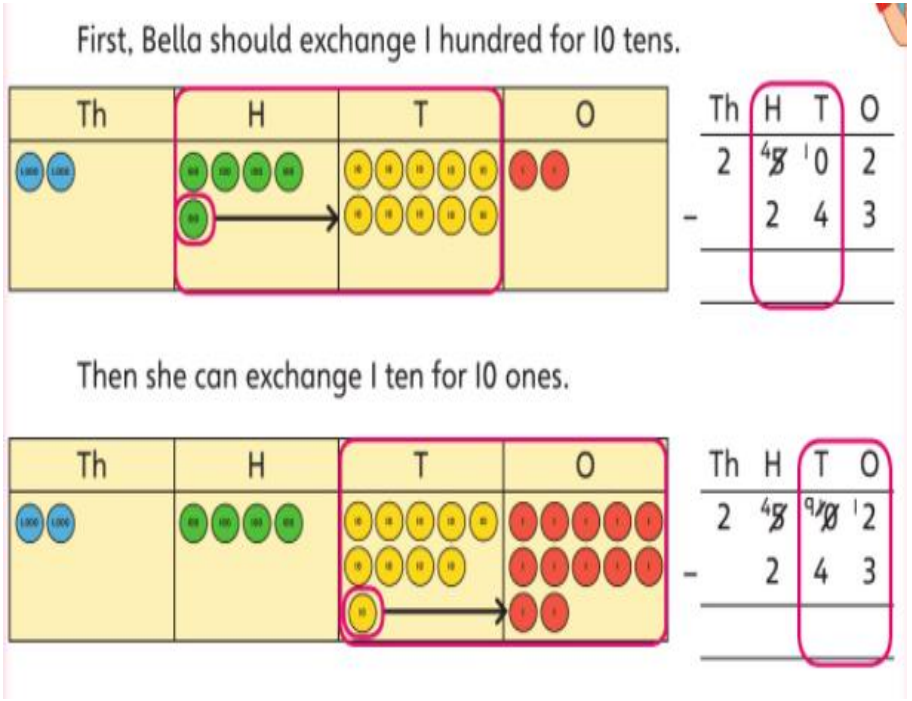
I give you 10 tens, you must give me _____ hundred.

If I give you 20 tens, you must give me _____ hundreds.

model exchanging 10 tens to hundred

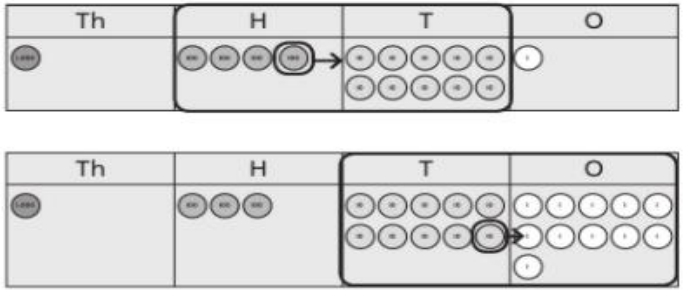
Walnut Class





Challenge

1 Olivia is reading a story that is 1,401 words long. She has read 225 words so far. How many words does she have left to read?



	Th	H	T	O
	1	4	0	1
−		2	2	5

☐ − ☐ = ☐

She still has ☐ words left to read.

2 Draw place value counters to show the exchanges that need to be made. Complete the subtraction.

Th	H	T	O

	Th	H	T	O
	2	2	0	2
−		1	5	7

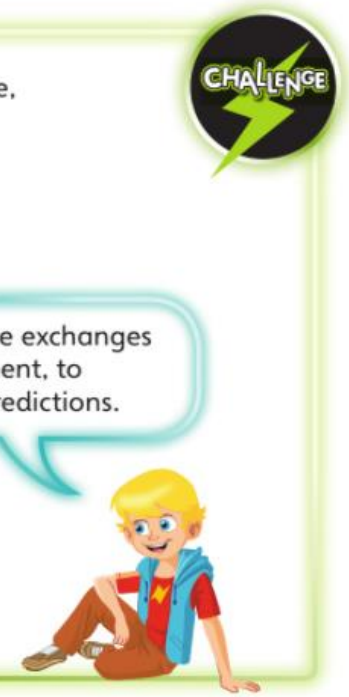
4 Predict the exchanges you will need to make, then complete the subtractions to check.

☐ = 5,055 − 2,929

☐ = 5,505 − 2,929

☐ = 5,005 − 2,929

☐ = 5,005 − 2,525





Year 2:
2, 5 and 10 times table

Year 3:
2, 5 and 10 times tables
3, 4 and 8 times tables

Year 4:
All times tables up to 12 X 12

Years 5 and 6:
All times tables up to 12 X 12, including division facts and related multiplication facts (e.g.: 60 X 4)

[Times Tables Policy: Mathematics | Hallfield Primary School (hallfieldschool.org.uk)]

