HIAS Maths Team: Number Facts: Year 1

Number and place value

Pupils should be taught to:

- count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- count, read and write numbers to 100 in numerals
- count in multiples of twos, fives and tens
- given a number, identify one more and one less

Addition and subtraction

Pupils should be taught to:

- read, write, and interpret mathematical statements involving addition (+) and subtraction (-) and equals (=) signs
- represent and use number bonds and related subtractions facts within 20
- add and subtract one-digit and two-digit numbers to 20, including zero
- solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = □ - 9.

Fractions

Pupils should be taught to:

- recognise, find, and name a half as one of two equal parts of an object, shape or quantity
- recognise, find, and name a quarter as one of four equal parts of an object, shape, or quantity

Measure

Pupils should be taught to:

- recognise and know the value of different denominations of coins and notes
- sequence events in chronological order using language such as before and after, next, first, today, yesterday, tomorrow, morning, afternoon, and evening
- recognise and use language relating to dates, including days of the week, weeks, months, and years

Number Facts: Number and place value

- Know the sequence of counting in multiples of 2.
- Know the sequence of counting in multiples of 10.
- Know the sequence of counting in multiples of 5.
- Say one more or one less than any number up to 20.

Number Facts: Addition and subtraction

- Know the number bonds and related subtraction facts for all numbers to 5

For example:

4 + 0 = 4	4 – 0 = 4
3 + 1 = 4	4 – 1 = 3
2 + 2 = 4	4 – 2 = 2
1 + 3 = 4	4 – 3 = 1
0 + 4 = 4	4 – 4 = 0

- Know the number bonds for all numbers to 10 and the related subtraction facts.
- Know the number bonds for all numbers to 20 and the related subtraction facts.

For example

10 + 2 = 12	12 – 2 = 10
9 + 3 = 12	12 – 3 = 9
8 + 4 = 12	12 – 4 = 8

- Recognise that ‘teens’ numbers comprise one ten and some ones.

Number facts: Measure

- Say the days of the week and the months of the year in the correct order.
- Recognise the coins and notes of the realm and starting with 1p, 2p, 5p, 10p, 20p.
- Apply number bond knowledge to coins
  10p + 1p = 11p
  10p +2p = 12p

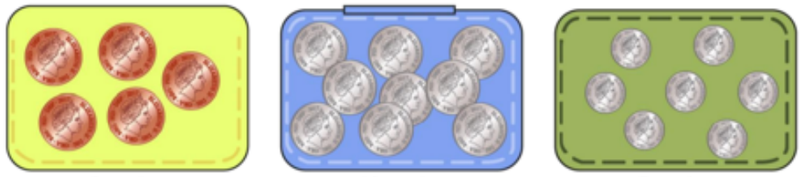
Number Facts: Fractions

Know that……

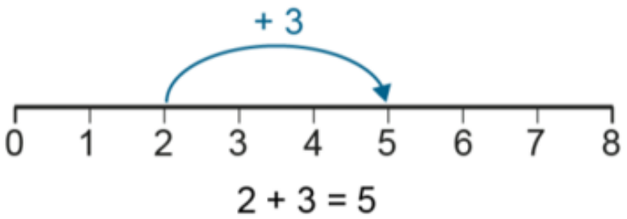
½ + ½ = 1 whole

¼ + ¼ + ¼ + ¼ = 1 whole

Mathematical models and images to support conceptual understanding underpinning key facts in Year 1



Counting in 2s , 5s and 10s in the context of money

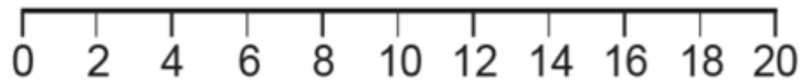


2 + 3 = 5

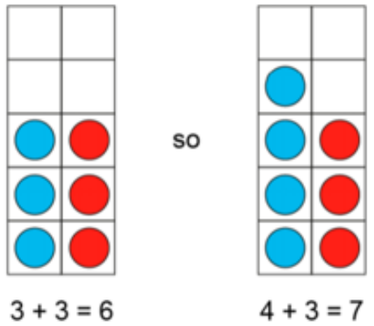
Number line with addition equation

+	0	1	2	3	4	5	6	7	8	9	10
0	0+0	0+1	0+2	0+3	0+4	0+5	0+6	0+7	0+8	0+9	0+10
1	1+0	1+1	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	
2	2+0	2+1	2+2	2+3	2+4	2+5	2+6	2+7	2+8		
3	3+0	3+1	3+2	3+3	3+4	3+5	3+6	3+7			
4	4+0	4+1	4+2	4+3	4+4	4+5	4+6				
5	5+0	5+1	5+2	5+3	5+4	5+5					
6	6+0	6+1	6+2	6+3	6+4						
7	7+0	7+1	7+2	7+3							
8	8+0	8+1	8+2								
9	9+0	9+1									
10	10+0										

Addition facts within 10

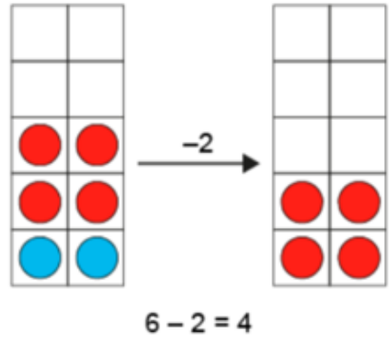


Number line to support counting in multiples of 2



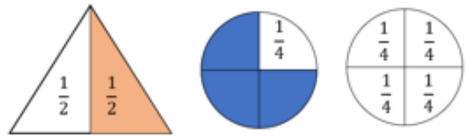
3 + 3 = 6 4 + 3 = 7

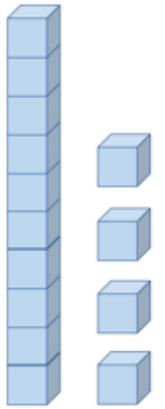
Tens frames with counters to show near doubles addition strategy



6 – 2 = 4

Tens frames with counters to show subtracting two



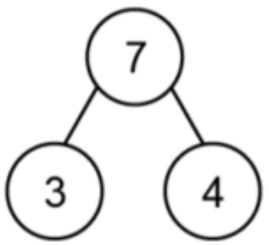


Fourteen is one ten and four ones

14 = 10 + 4

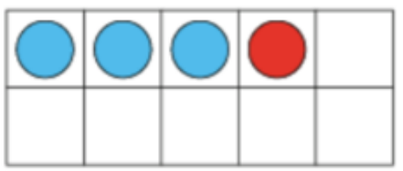
	Blue	Red
	0	6
	1	5
	2	4
	3	3
	4	2
	5	1
	6	0

Systematic patterning to partition six



7 – 3 = 4

Cherry partitioning model with subtraction equation



3 + 1 = 4

Tens frame with addition equation