



Maths - Addition and Subtraction

Lesson sequence

1. Fact Families
2. Related Facts
3. Bonds within 100
4. Add and subtract 1s
5. Add by making 10
6. Add 3 1-digit numbers
7. Add and subtract across 10
8. Add and subtract 2 2-digit numbers
9. Compare number sentences
10. Missing number problems

Key Vocabulary

- Ones
- Tens
- Digit
- Addition
- Add
- More
- Total / Altogether / Sum
- Check
- Make
- Compare
- Related facts
- Fact family
- Inverse
- Relationship
- Patterns
- Number track
- Combined
- Commutativity/commutative

Sticky learning

New Knowledge

- To know the = sign means equals to
- To know and recall addition subtraction facts to 20 fluently
- To know that addition of two numbers can be done in any order (commutative)
- To know that subtraction is not commutative
- To know that there is a relationship between addition and subtraction and we call this the inverse
- To know that the sum of two numbers is the answer you get when you add them both together

New Skills

- To use place value and number facts to solve problems
- To partition numbers in different ways (for example, $23 = 20 + 3$ and $23 = 10 + 13$) to support subtraction
- To use addition and subtraction facts to 20 to derive related facts up to 100
- To add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones, a two-digit number and tens, two two-digit numbers and adding three one-digit numbers
- To show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot
- To use the inverse relationship between addition and subtraction to check calculations and solve missing number problems;
- To solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures
- To apply their increasing knowledge of mental and written methods
- To record addition and subtraction in columns;

● = 10 ▲ = 20 ■ = 30

■ + ▲ = 50

● + ■ = 40

▲ + ● = 30

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

Add three 1-digit numbers

Represent each calculation card in the table below.

Ten frames:

Describe:
8 is a part, 3 is a part, 1 is a part.
The whole is 12.

Number sentences:
 $8 + 3 + 1 = 12$
 $12 = 8 + 3 + 1$

Part-whole model and number sentences:

Draw it:

16

11 5

$6 + 11 = 17$

$11 + 6 = 17$

$17 - 6 = 11$

$17 - 11 = 6$

$5 + 9 = 14$

$5 + 9 = 14$ so $10 + 4 = 14$

Show it: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20