

Year 1 Maths Morning

What we cover and how you can help at home

Aims for this session

- To become familiar with the National Curriculum expectations for the end of Year 1.
- To enable you to become more confident with supporting your child at home.
- To gain an insight into how maths is taught here in Year 1.

Curriculum overview 2014 – What changed?!

- The new curriculum released in 2014 goes further than before. There are higher expectations for what Year 1 have to achieve by the end of the year e.g. counting in 2s, 5s and 10s (this was taken from the Year 2 objectives.)
- There is a bigger emphasis on reasoning and problem solving skills. We are moving away from just 'rote' learning number facts and giving children 'bigger' numbers to work with.

What we cover in Year 1

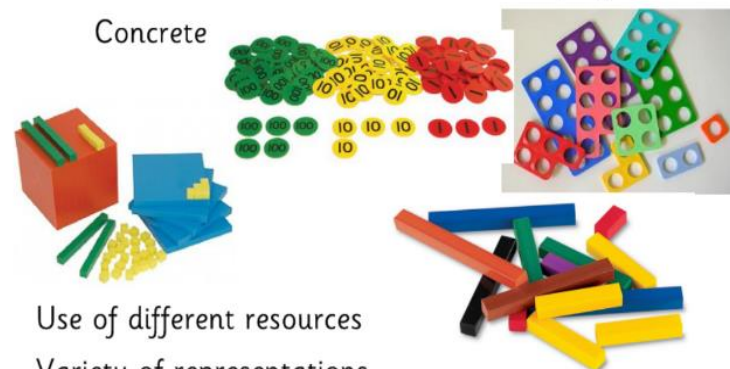
- Number and place value
- Addition and subtraction
- Multiplication and division
- Fractions
- Measurement
- Properties of shapes
- Position and direction

How we cover it in Year 1 – CPA

- CONCRETE – PICTORAL – ABSTRACT
- Can children represent and express their learning in a variety of ways?

C → P → A

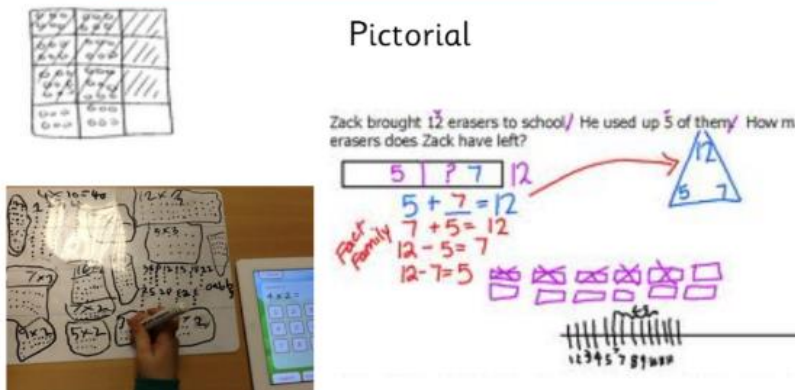
Concrete



Use of different resources
Variety of representations

C → P → A

Pictorial



Zack brought 12 erasers to school. He used up 5 of them. How many erasers does Zack have left?

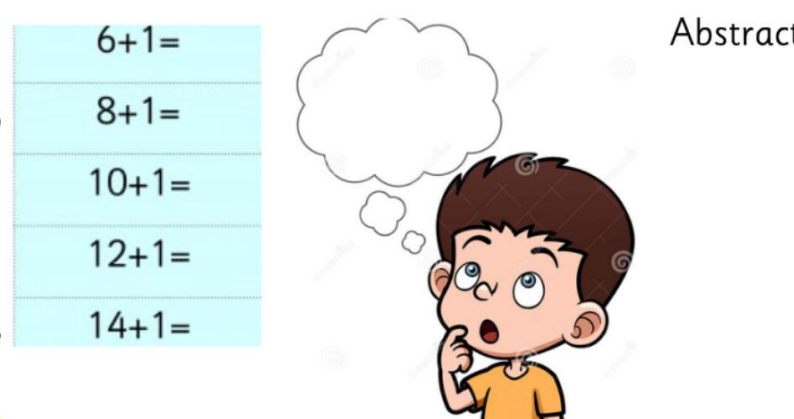
5 + 7 = 12
7 + 5 = 12
12 - 5 = 7
12 - 7 = 5

Fact family

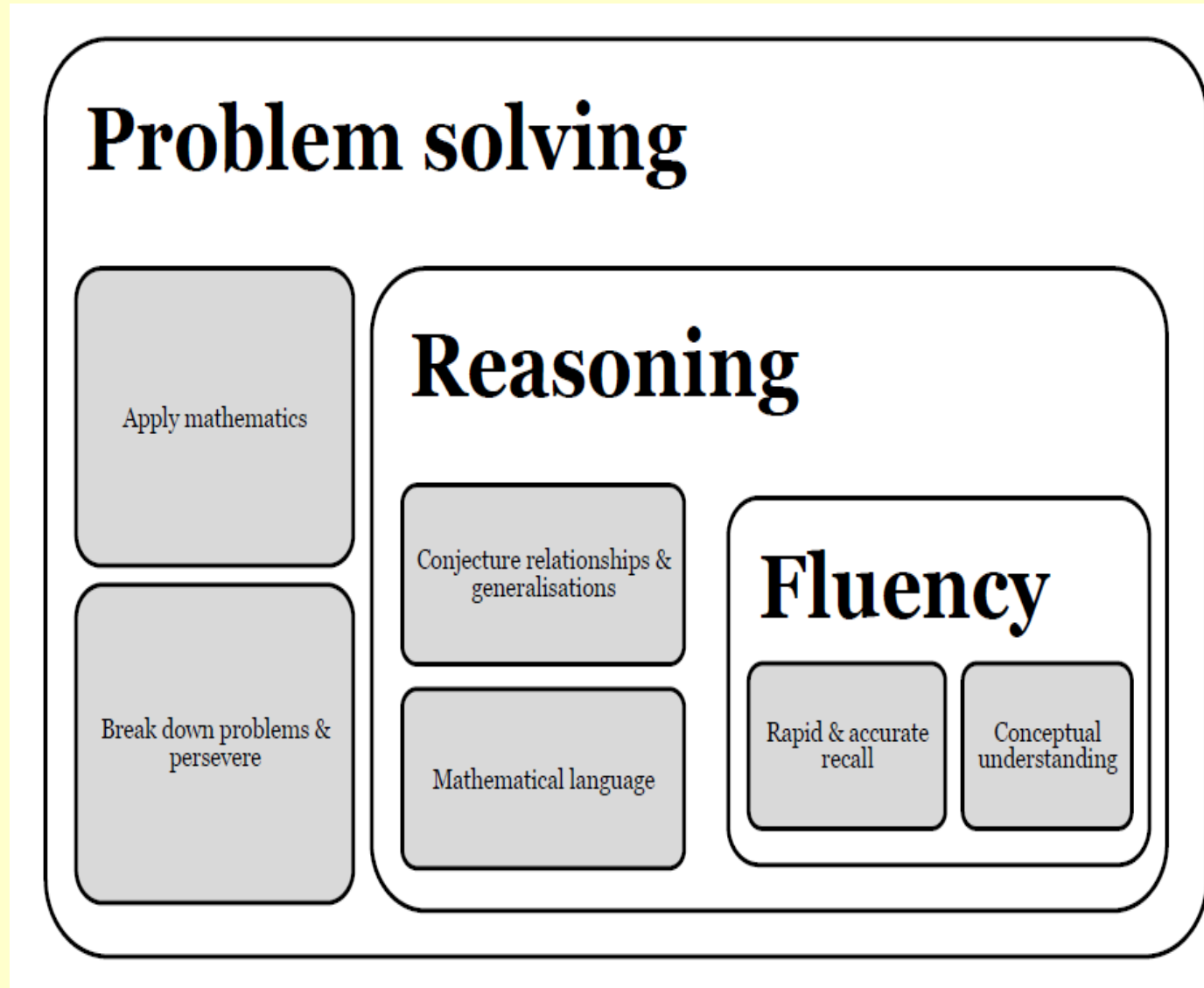
C → P → A

Abstract

6+1=
8+1=
10+1=
12+1=
14+1=



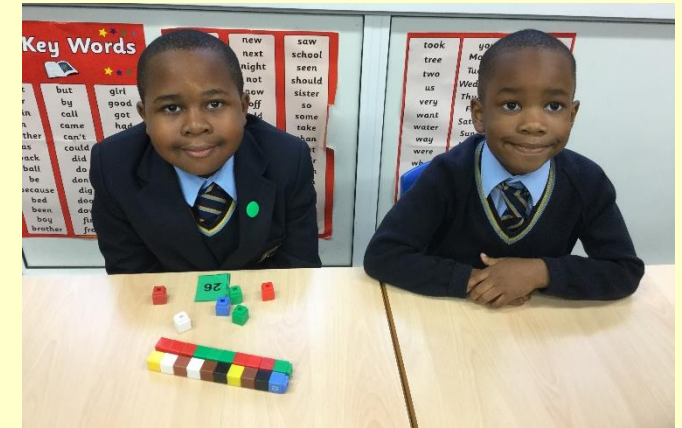
How we cover it in Year 1 – A maths apple!



Number – Number and Place Value

- Number – Number and Place Value
- I can count to and across 100, forwards and backwards, beginning with 0 or 1, or **from any given number**.
- I can count, read and write numbers to 100 in numerals; **count in multiples of twos, fives and tens**.
- I can given a number, identify one more and one less.
- I can identify and represent numbers using **objects and pictorial representations** including the number line, and use the **language** of: equal to, more than, less than (fewer), most, least.
- I can read and write numbers from 1 to 20 in numerals and words.

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



My number line



How to help at home

- Count as you take steps or climb stairs.
- Look out for bus numbers.
- Guessing games 'I am thinking of a number 1 more than 72'
- Encourage the use of key language 'which supermarket queue has the least people? Why do we want to choose that one?'

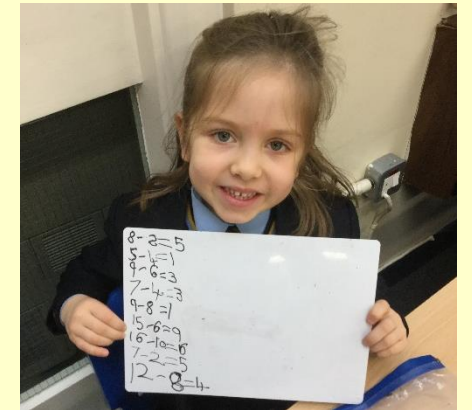
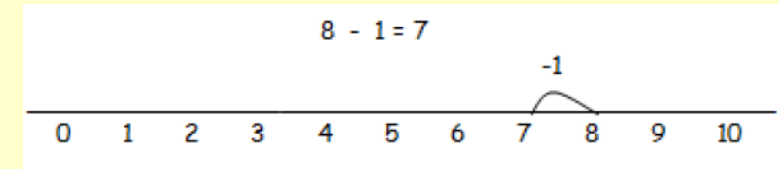
Number – Addition and Subtraction

- **Number – Addition and Subtraction**

- I can read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs.
- I can represent and use number bonds and related subtraction facts **within 20**.
- I can add and subtract one-digit and two-digit numbers to 20, including zero
- I can solve one-step problems that involve addition and subtraction, using **concrete objects and pictorial representations, and missing number problems such as** $7 = _ + 5$.

Key Vocab:

- Plus
- Add
- Together
- More
- Less
- Take away
- Subtract
- Equals



How to help at home

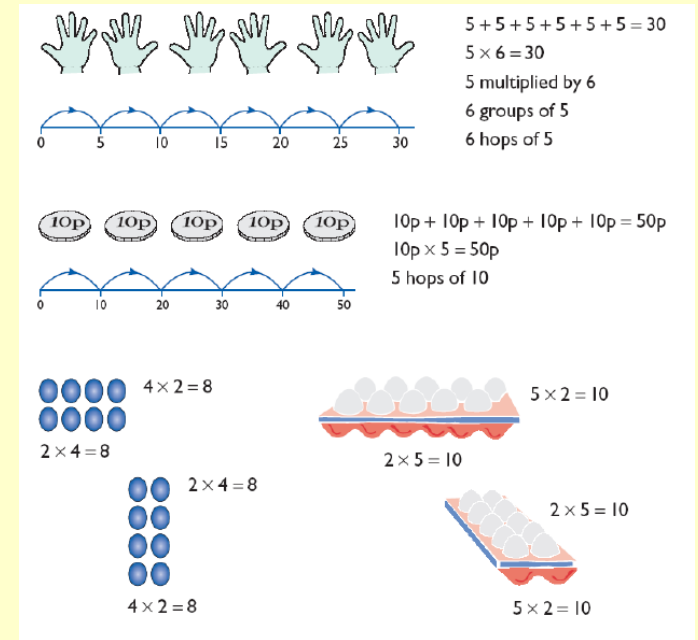
- Using lego bricks add and subtract 2 digit and 1 digit numbers
- e.g. $13 + 4 = _$
- Number bonds to 10 - songs and games on the internet and stretching children to think about number bonds to 20.
- Shopping games 'I need 6 apples and I only have 2. How many more do I need?'

Number – Multiplication and Division

- **Number – Multiplication and Division**
- I can solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays *with the support of the teacher.*

Key Vocab:

- Arrays
- Multiply
- Times
- Repeated addition
- Divide
- Share
- Repeated subtraction



How to help at home

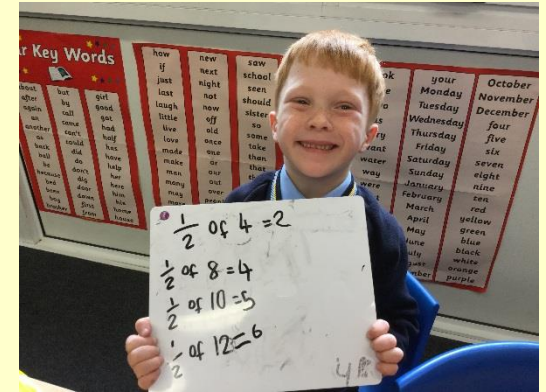
- See dividing as sharing and relate to fractions. 'We have 16 grapes and need to share/divide them between 4 people. How many do they get each?'
- See multiplication as repeated addition. Look for patterns e.g. How could we quickly count how many eggs are in the carton?

Number – Fractions

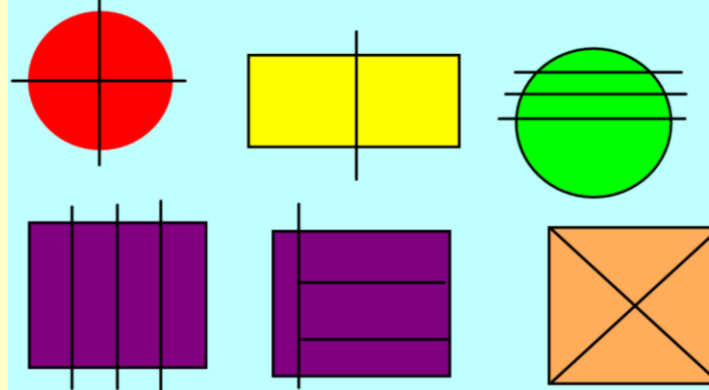
- Number – Fractions
- I can recognise, find and name a half as one of two equal parts of an object, shape or quantity.
- I can recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.

Key Vocab:

- Half
- Quarter
- Fraction
- Equal
- Share
- Whole
- Part

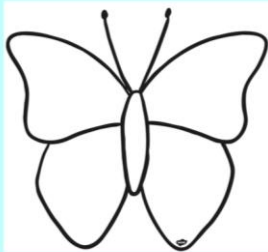
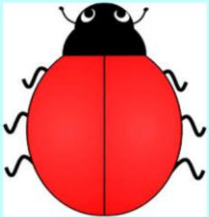


Are these shapes split into quarters?



Can I find a quarter of an amount?

What shall we use? Why? Chat to your friend!



How to help at home

- Cutting objects EQUALLY in to halves and quarters e.g. a banana.
- Encourage your child to share out a number of objects equally between people.

Measurement

- Measurement
- I can compare, describe and solve practical problems for:
 - lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]
 - mass/weight [for example, heavy/light, heavier than, lighter than]
 - capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]
 - time [for example, quicker, slower, earlier, later]
- I can measure and **begin** to record the following:
 - lengths and heights
 - mass/weight
 - capacity and volume
 - time (hours, minutes, seconds)



How to help at home

- Use the language in everyday situations e.g. Which bag is heavier? Would it be quicker to walk or get the bus to school? How could we check?
- 'Can I carry my three heavy water bottles in a paper bag? Explain why!'
- Experiment in the kitchen and at bath time with scales, jugs and rulers. Gather different objects to measure and discuss using language.

Measurement

- Measurement
- I can recognise and know the value of different denominations of coins and notes.
- I can sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].
- I can recognise and use language relating to dates, including days of the week, weeks, months and years.
- I can tell the time to the hour and half past the hour and draw the hands on a clock face to show these times



How to help at home

- Handle money and pay for things at the shop. Role play paying with the correct coins. How many different ways can you make 10p?
- Use everyday language to discuss birthdays, holy days and holidays in relation to time.
- Look at the clock and make plans for a time – can they be time keeper.

Geometry – Properties of Shapes

Geometry – Properties of Shapes

- I can recognise and name common 2-D and 3-D shapes, including:
 - 2-D shapes [for example, rectangles (including squares), circles and triangles]
 - 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].

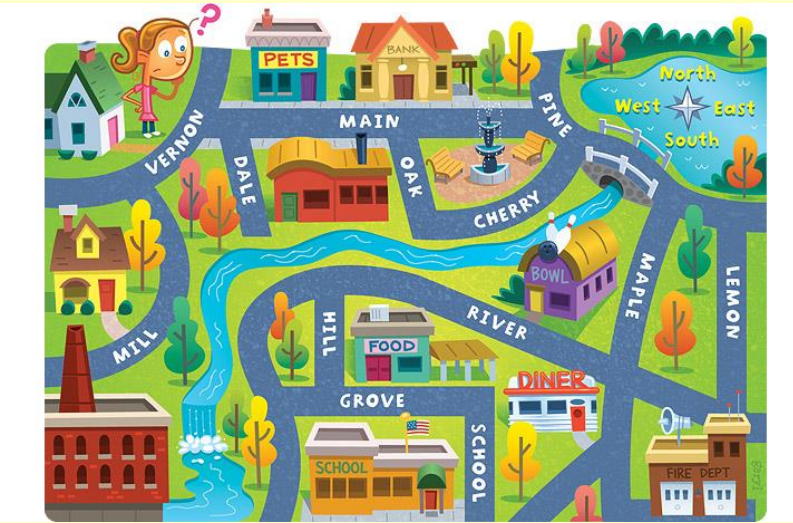


How to help at home

- Look out at home and in the supermarket for a variety of 2D and 3D shapes – can they name and describe them?
- Use the language face, edge, vertices for 3D shapes.

Geometry – Position and Direction

- Geometry – Position and Direction
- I can describe position, direction and movement, including whole, half, quarter and three-quarter turns.



How to help at home

- Discuss your directions for journeys e.g. we will turn left at the end of this road.
- In the park can they do a whole turn, half turn etc.

Questions?

