Year 1 Parent Workshop

Thursday 24th September

Please take a seat

Today's workshop:

- Our vision for maths at BGPS.
- Year 1 maths curriculum.
- How we teach children maths at BGPS, *including models and representation.*
- Changes from reception to year 1.
- How you can continue the learning at home, *including homework.*

Our Vision for Maths at BGPS

At BGPS maths is engaging and purposeful, equipping children to achieve by knowing key mathematical facts, thinking flexibly and making connections.

We build on prior knowledge to ensure learning is accessible and challenging for all.

We inspire our children to be curious, enthusiastic and fluent mathematicians.

Curriculum: Key stage 1 – years 1 and 2

The principal focus of mathematics teaching in key stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the four operations, including with practical resources [for example, concrete objects and measuring tools].

At this stage, pupils should develop their ability to recognise, describe, draw, compare and sort different shapes and use the related vocabulary. Teaching should also involve using a range of measures to describe and compare different quantities such as length, mass, capacity/volume, time and money.

By the end of year 2, pupils should know the number bonds to 20 and be precise in using and understanding place value. An emphasis on practice at this early stage will aid fluency.

Pupils should read and spell mathematical vocabulary, at a level consistent with their increasing word reading and spelling knowledge at key stage 1.

Year 1 programme of study





Number – 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
- 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
- read and write numbers from 1 to 20 in numerals and words.



















Say the number that is 1 more

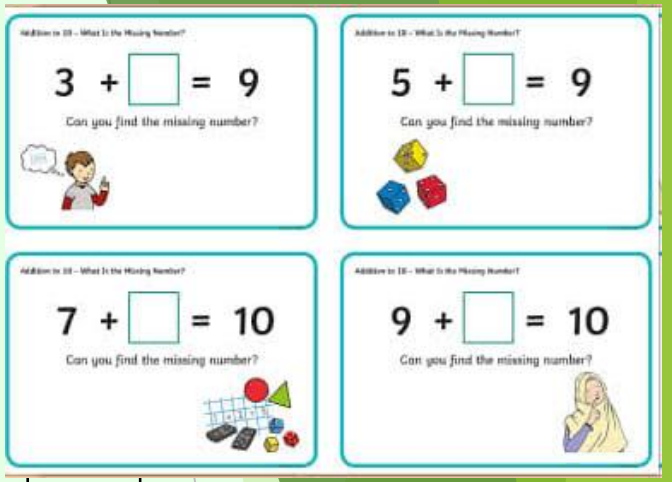
80

Show me the number written, on your fingers

seven

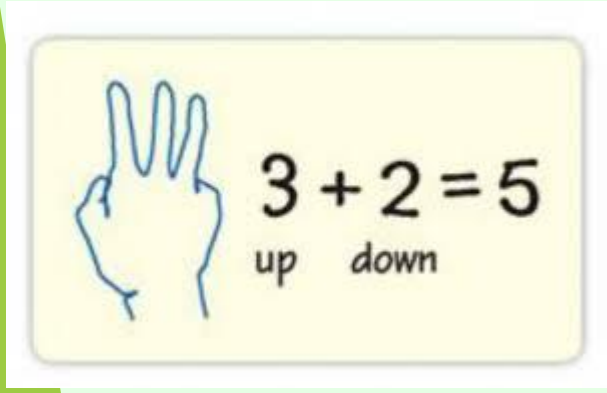
Year 1 programme of study

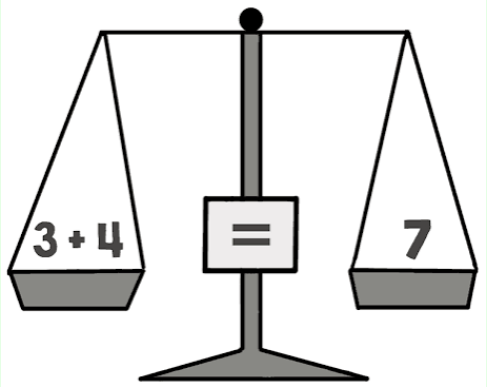
Number – addition and subtraction

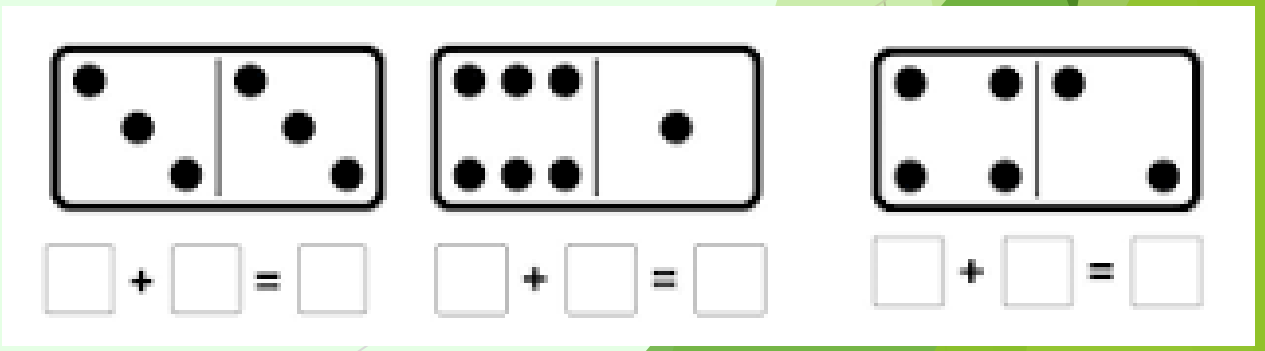


Pupils should be taught to:

- read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=) signs
- represent and use number bonds and related subtraction 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.







Represent number bonds to 10

1 + 9

2 + 8

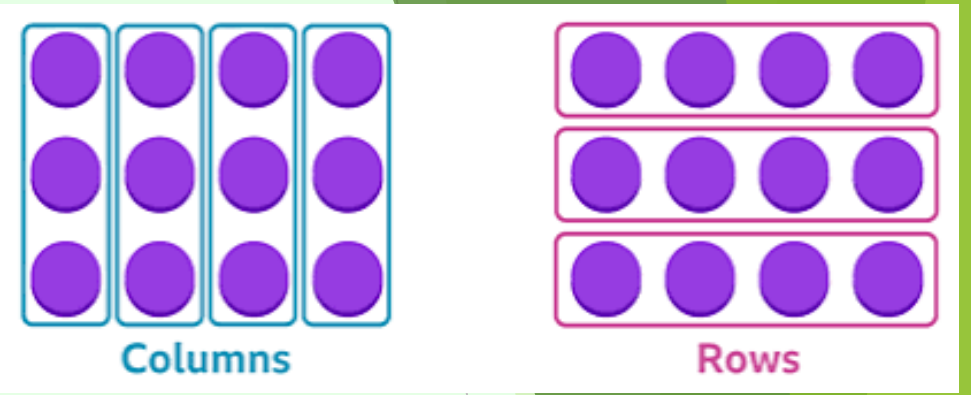
3 + 7

4 + 6

5 + 5

Year 1 programme of study

Number – multiplication and division



Pupils should be taught to:

- 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.

Number – 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.



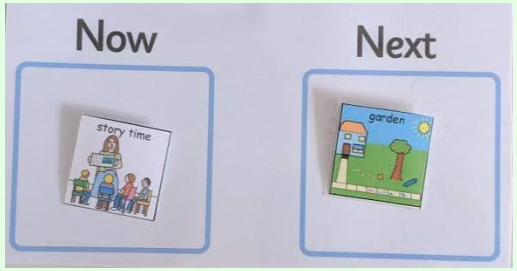
Year 1 programme of study

Measurement



Pupils should be taught to:

- 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]*
- measure and begin to record the following:
  - *lengths and heights*
  - *mass/weight*
  - *capacity and volume*
  - *time (hours, minutes, seconds)*







- recognise and know the value of different denominations of coins and notes
- sequence events in chronological order using language [for example, 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
- tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.



Year 1 programme of study

Geometry – properties of shapes



Pupils should be taught to:

- 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].*



Geometry – position and direction

Pupils should be taught to:

- describe position, direction and movement, including whole, half, quarter and three quarter turns.







How we teach maths

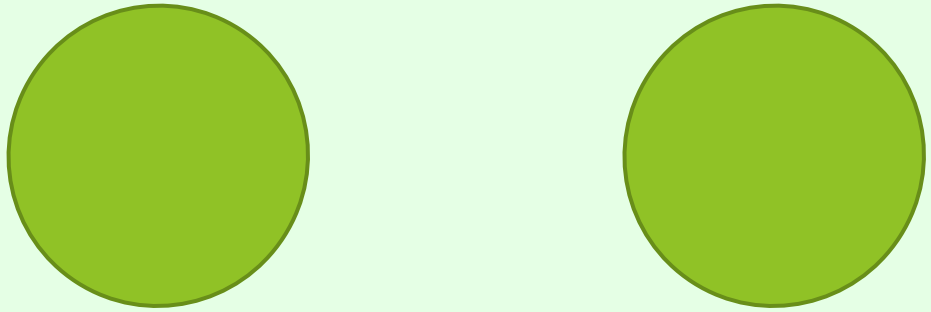


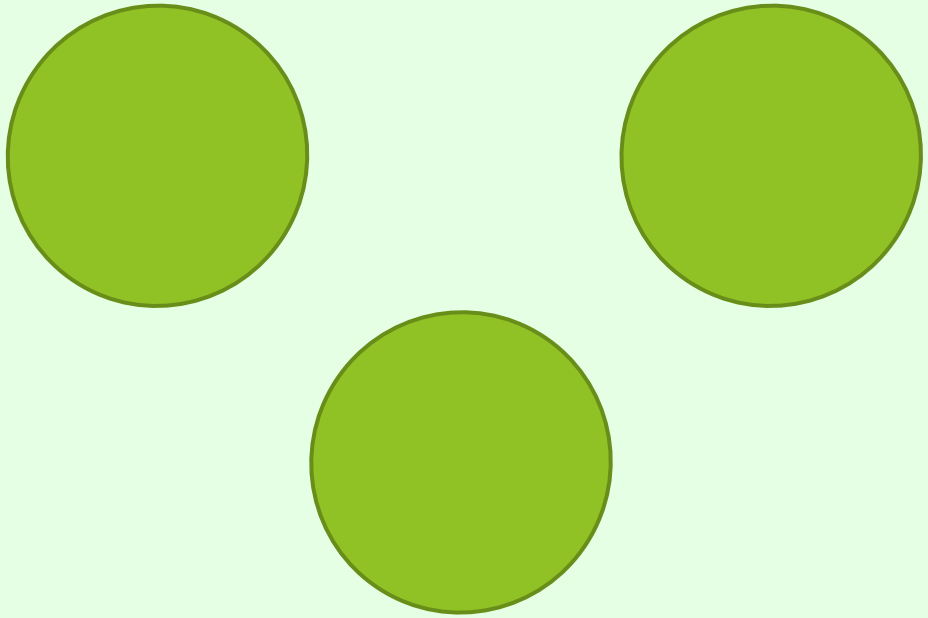
- Children are taught in a whole class setting.
- Teaching includes modelling from the teacher, practice where the children work guided by their teacher, they then work independently, overseen by the adult, who is able to clarify misunderstandings and support the children to correct their own mistakes.
- There is a strong emphasis on pupil talk, answering and asking questions to explain and strengthen their understanding.
- The children use practical resources, models and representations to expose structures and share their working.
- The maths lessons are interactive and collaborative. Expectations are high for all pupils and adaptations are made as needed, with staff providing additional scaffolds, resources and modelling to support individuals if they struggle.

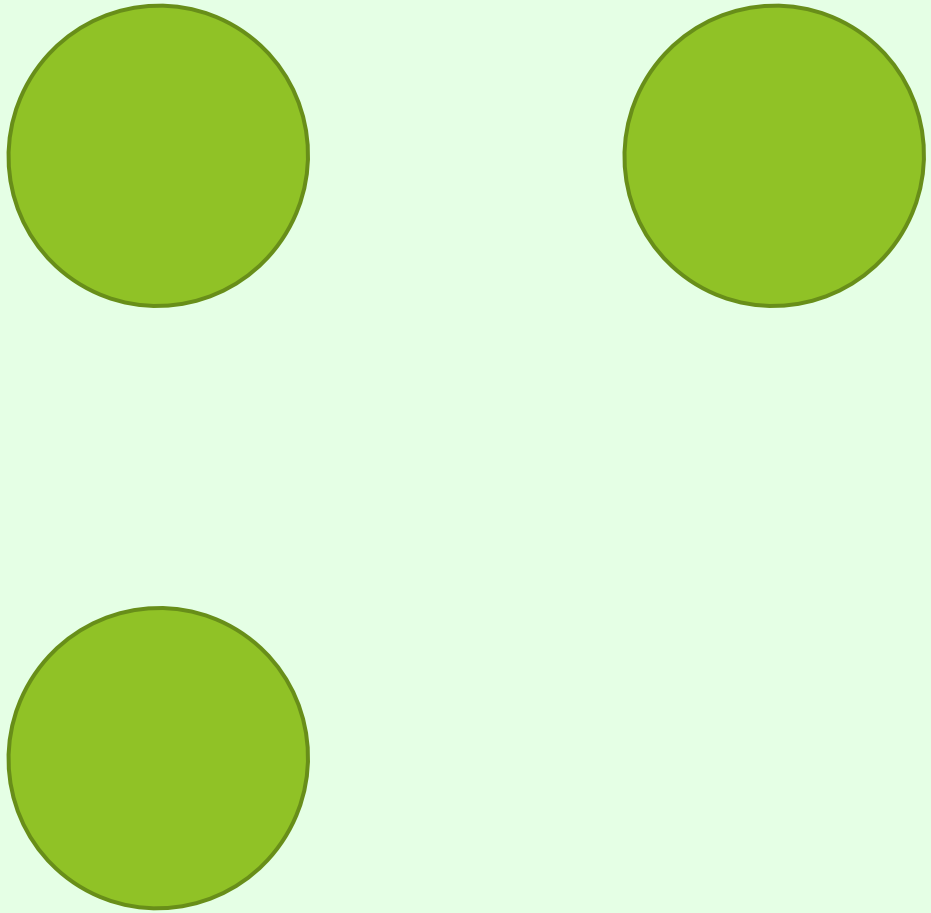
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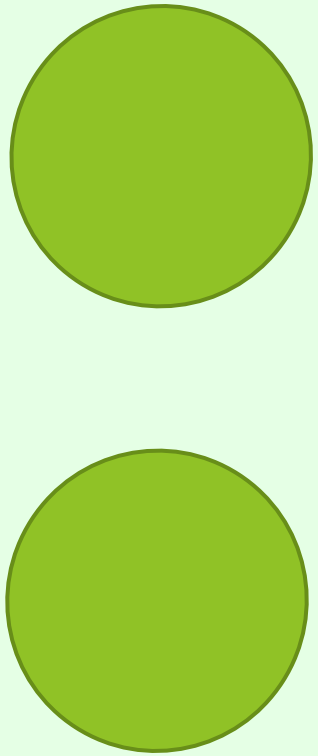
Don't count, say the amount.

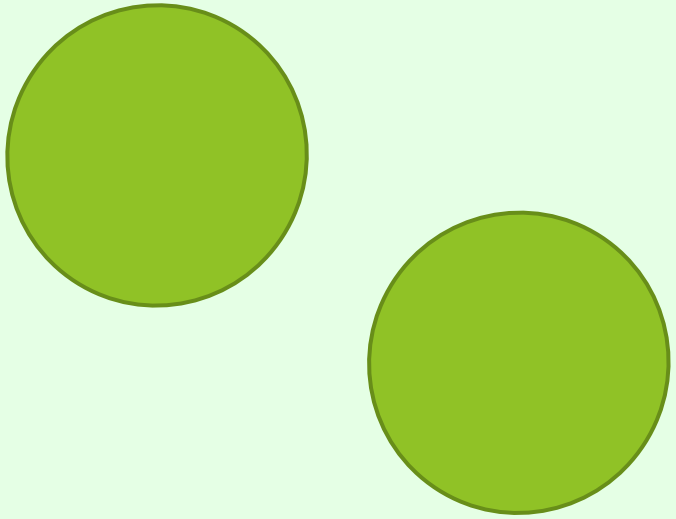
See it, say it, show it.

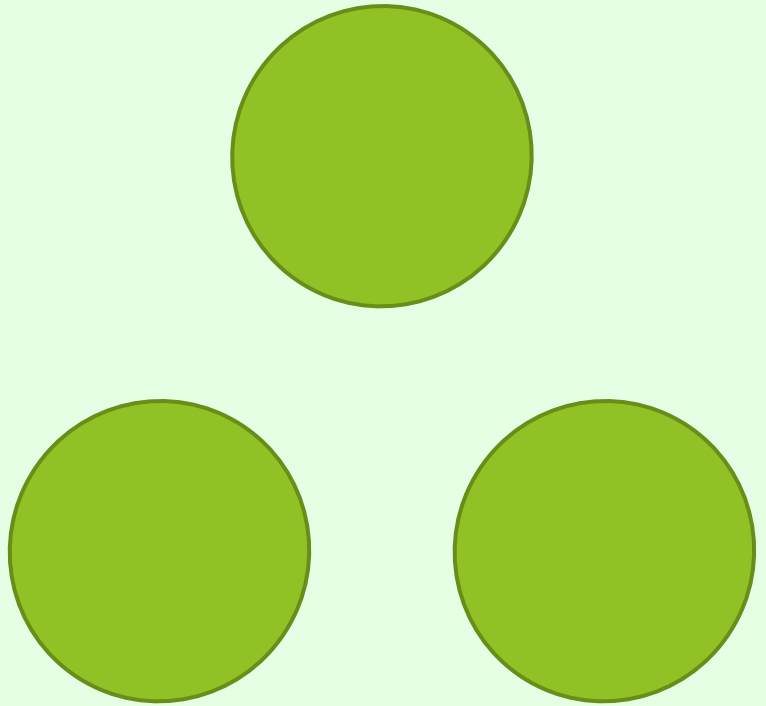


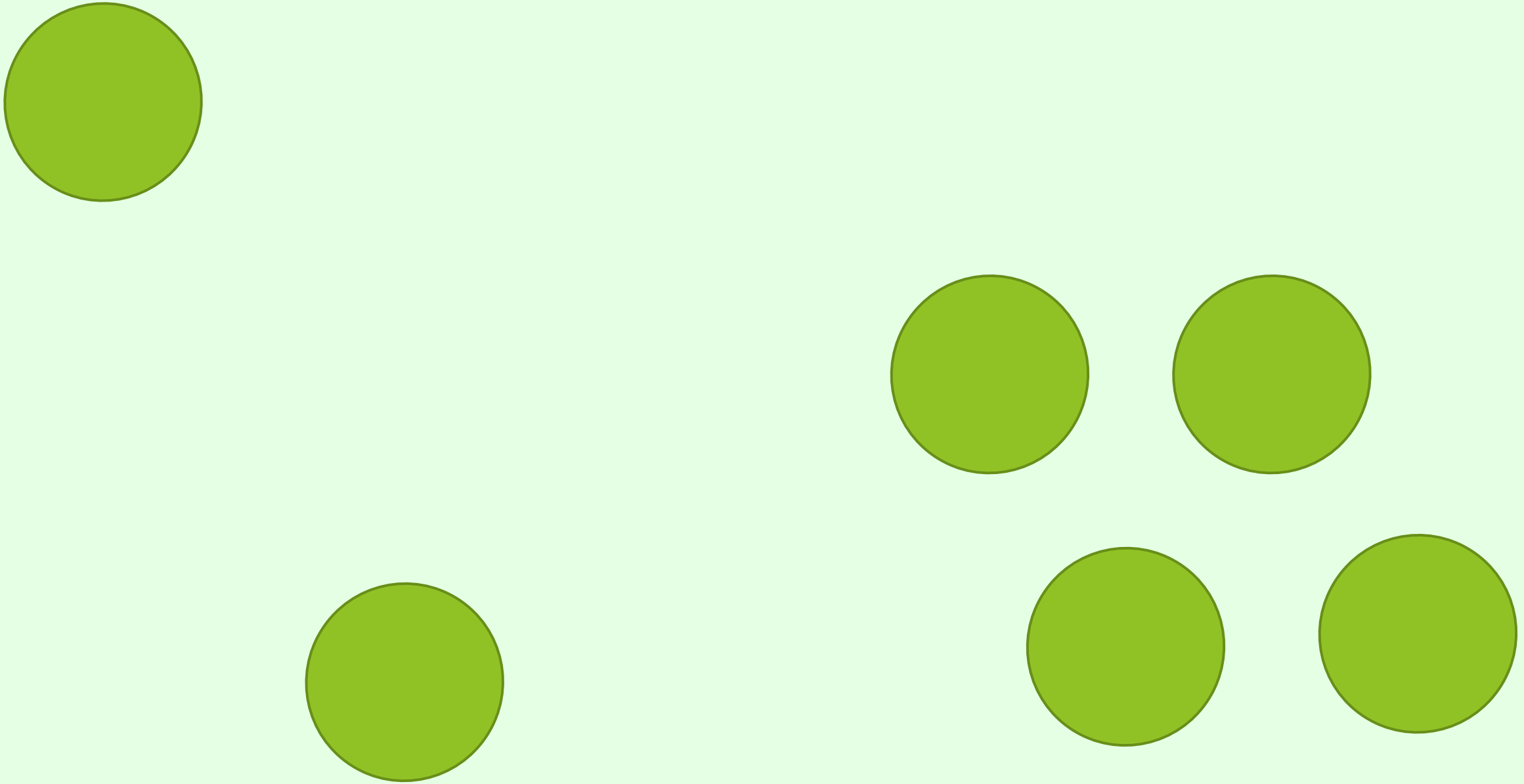


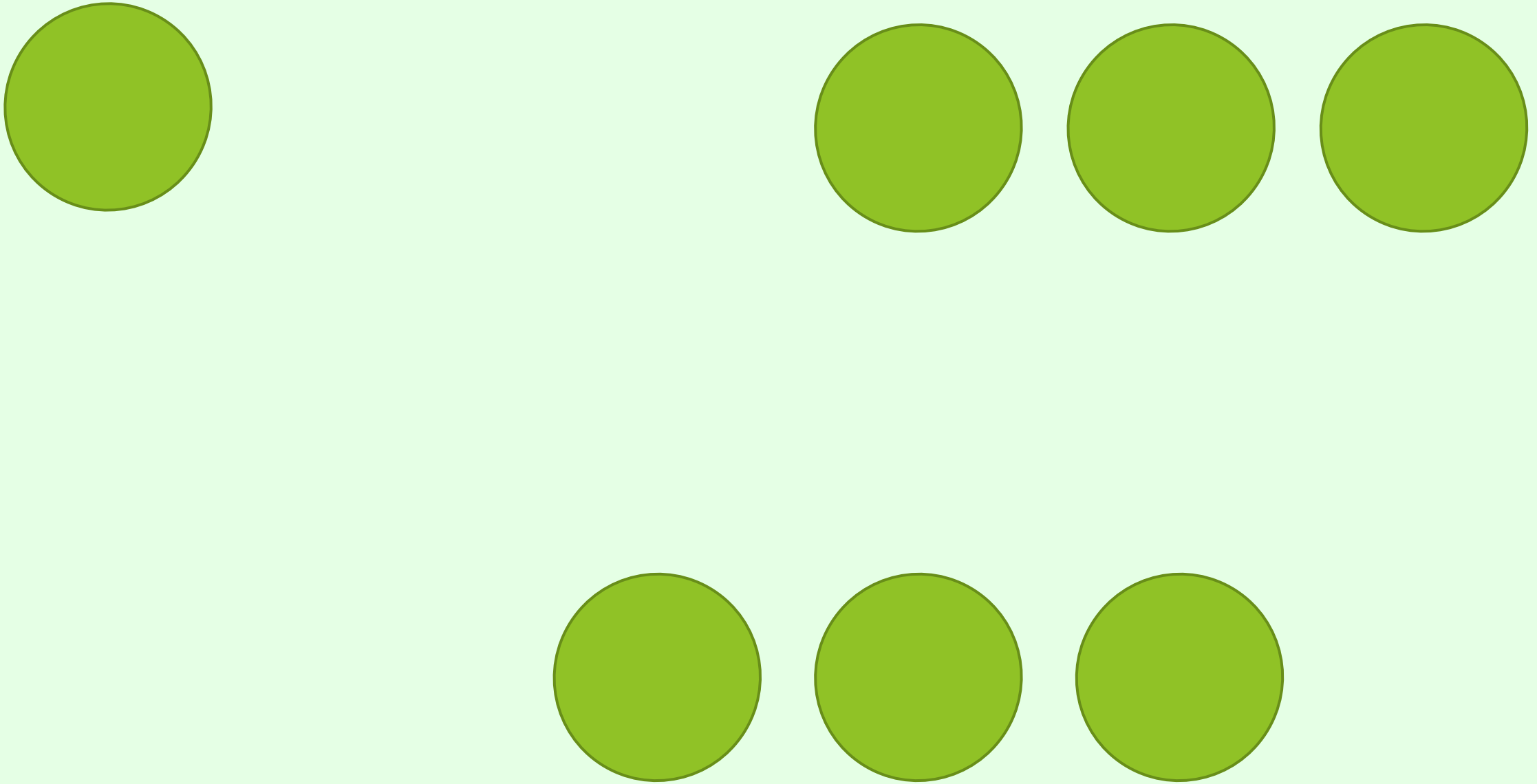




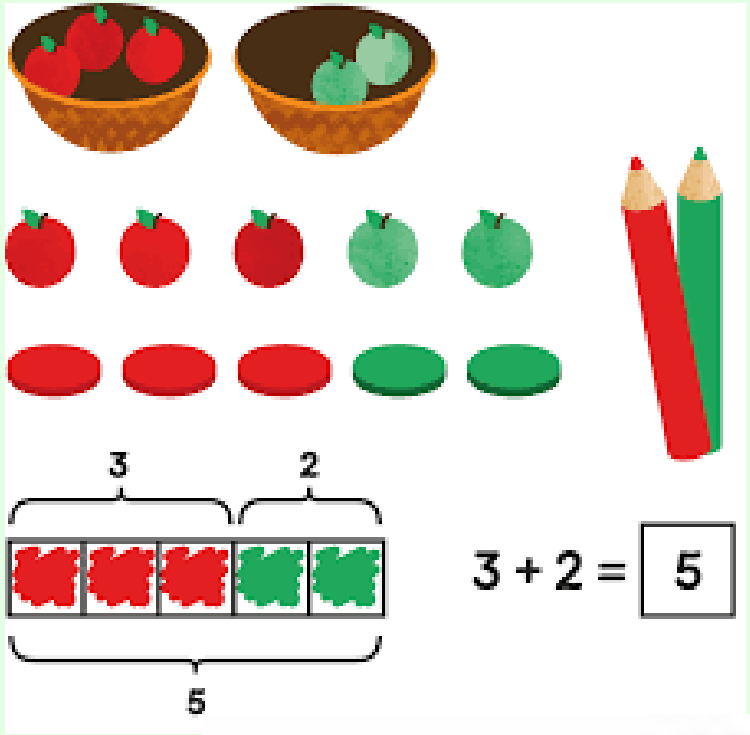




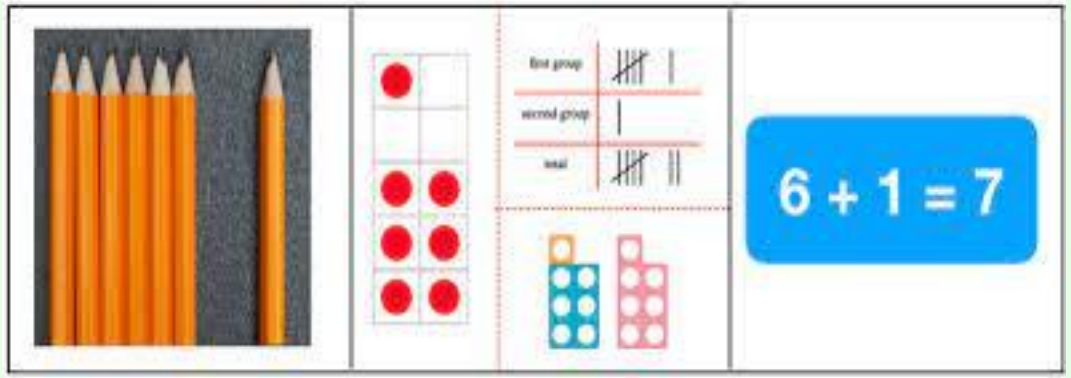




CPA – Concrete, Pictorial, Abstract



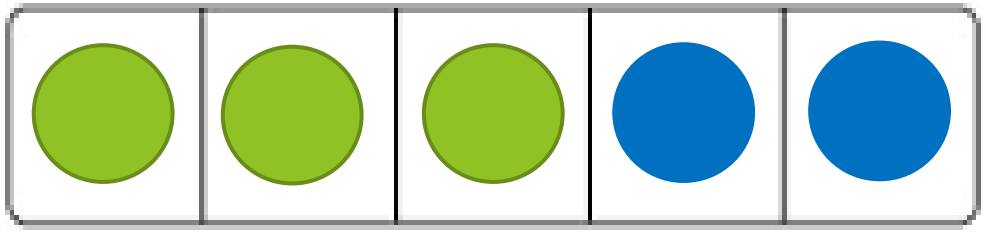




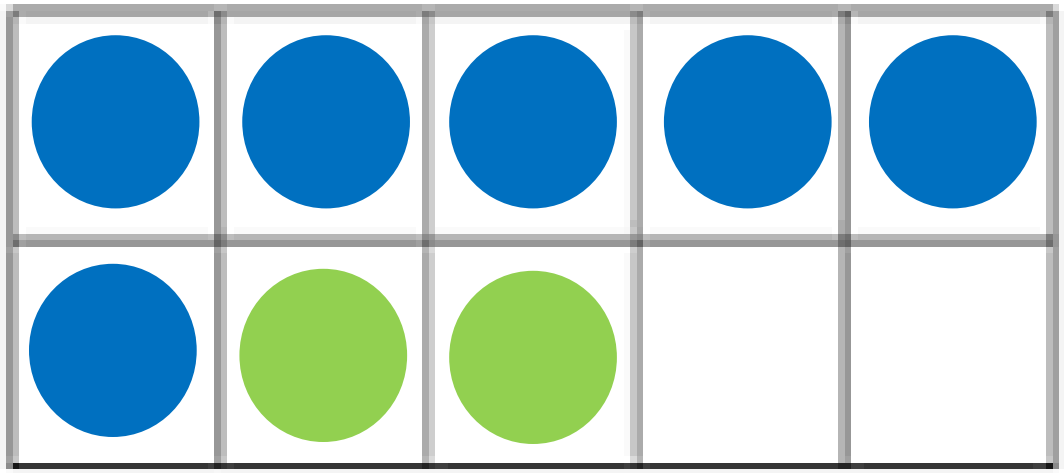


Representations and Models

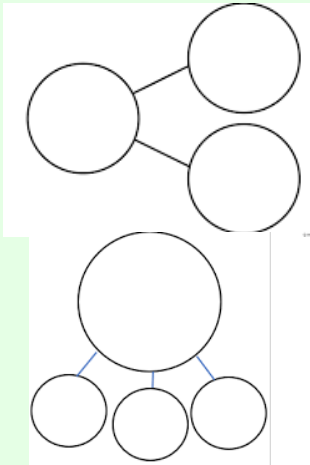
We use different models to help children understand more abstract concepts.

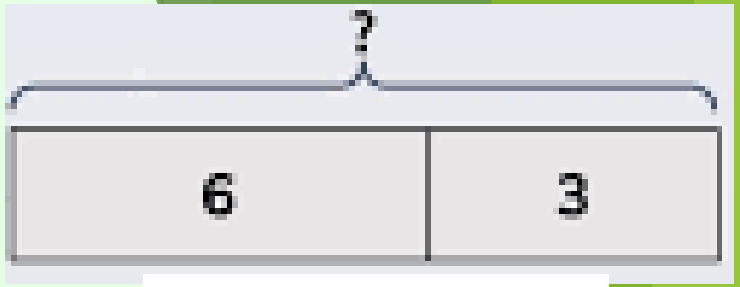


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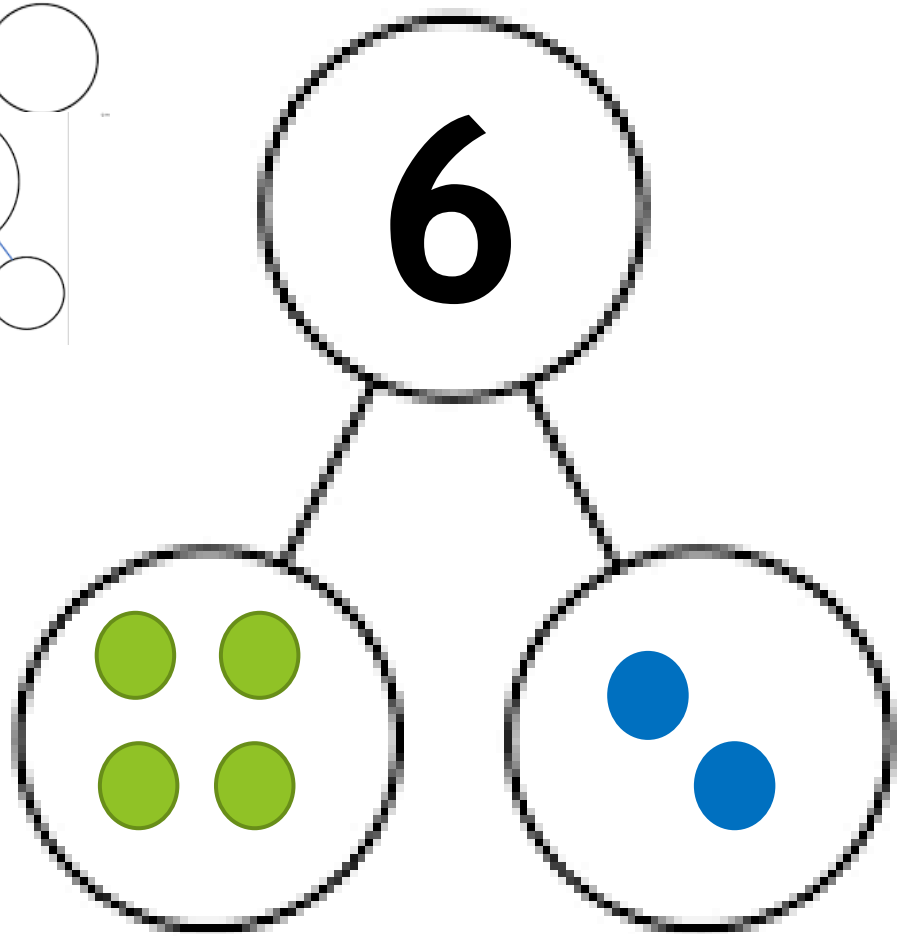


10 frame





Bar model



Part Whole model

Representations and Models





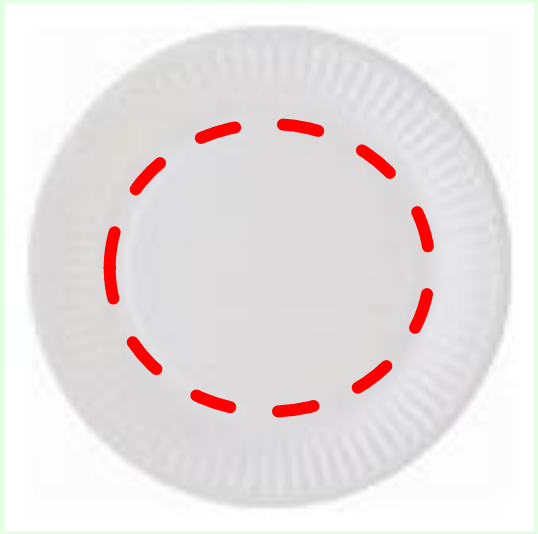






Representations and Models









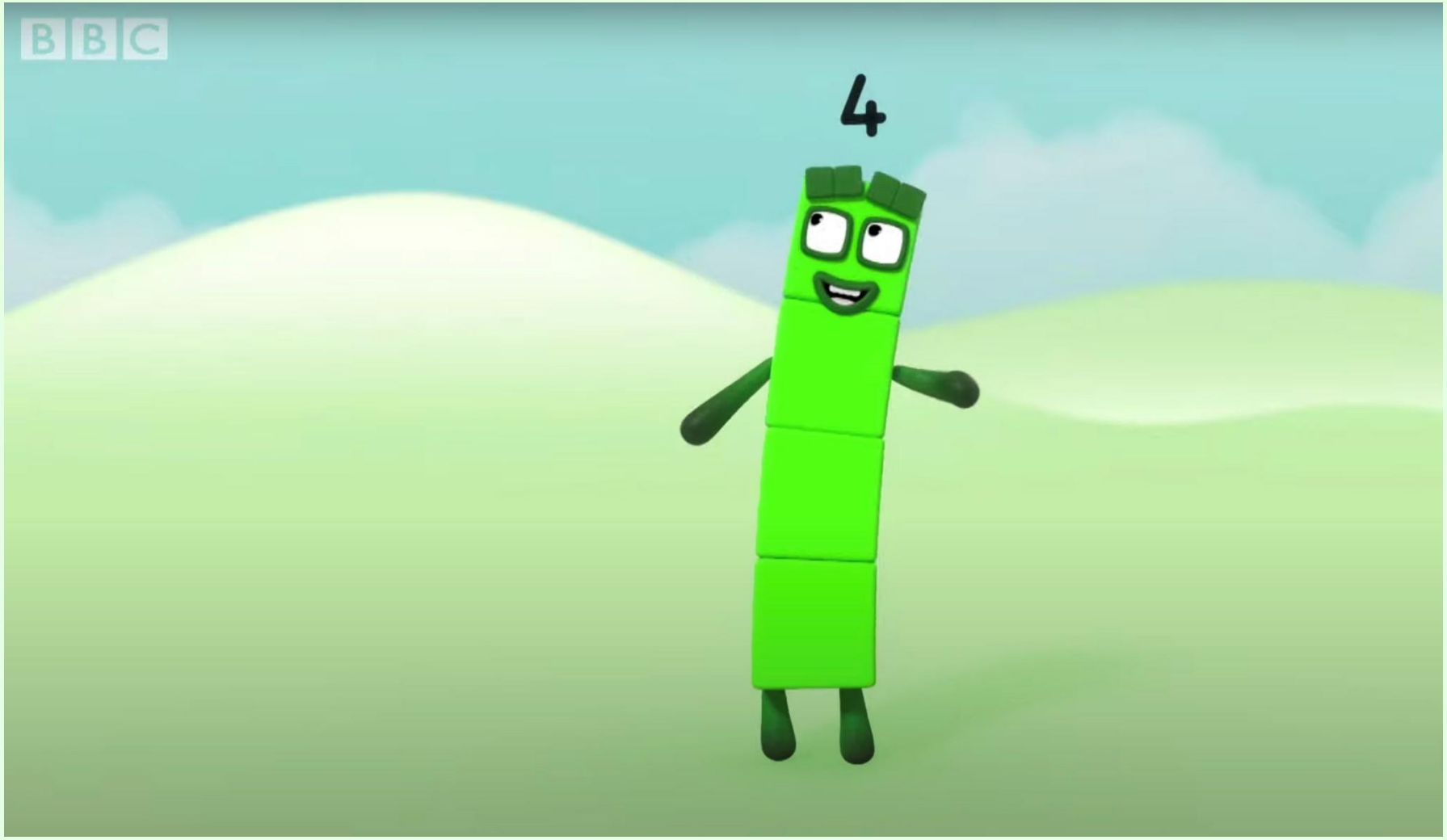
Changes from reception

- Children are taught at tables rather than on the floor.
- Recording becomes a little more formal, but the emphasis is still on finding the answer, noticing patterns and making links.
- Although the teaching is still whole class, there is a greater opportunity for independence.
- In reception, we use Mastering Number for our main maths lessons and we use WRM & book-based additional 'mini maths' sessions in the afternoon. From year 1 upwards, WRM is used to form the basis of the main daily maths lesson. The Mastering Number program is then used as an additional fluency session 4 times a week.

Numberblocks

Series 1, Episode 6: Four

https://www.ncetm.org.uk/classroom-resources/ey-numberblocks-at-home/



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Homework

In year 1 homework is used to practise and consolidate new learning and apply new skills in different contexts.

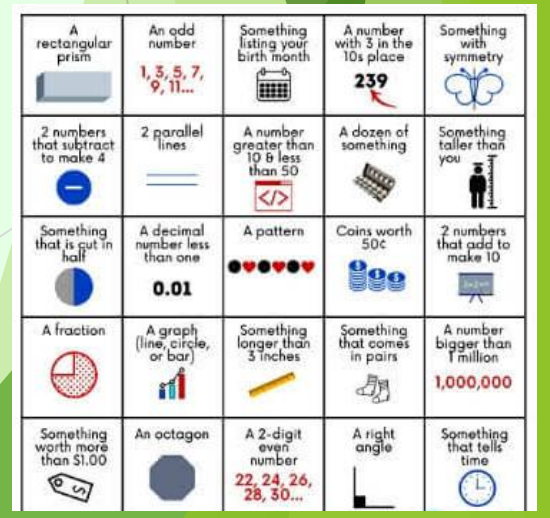
We like to send games and fun activities that allow the children to make progress and share their understanding with you at home. This allows the children to see maths in a real world context, helping to shape how they see and use maths as they grow.

There may be board games where you and your child (or an older sibling or family member) can play with or against them. It could be a task where the children have to identify or compare real items in the home or out and about.

The focus will always be on talking to process new learning and build on what they knew already, in preparation for what they learn next.







How you can continue to help at home



- Ask them about their day, what did they learn?
- Make time to do their homework with them.
- Notice things around you and share them with your child to model noticing and making links.



- Involve them in real maths at home, counting pegs when hanging out washing, laying the table with enough items for everyone, sharing treats out fairly with siblings, pairing socks from the laundry.
- Be positive about maths, even if you dislike it, even if you struggled with maths at school, even if you don't know the answer – help build their resilience and love of maths and numbers.

