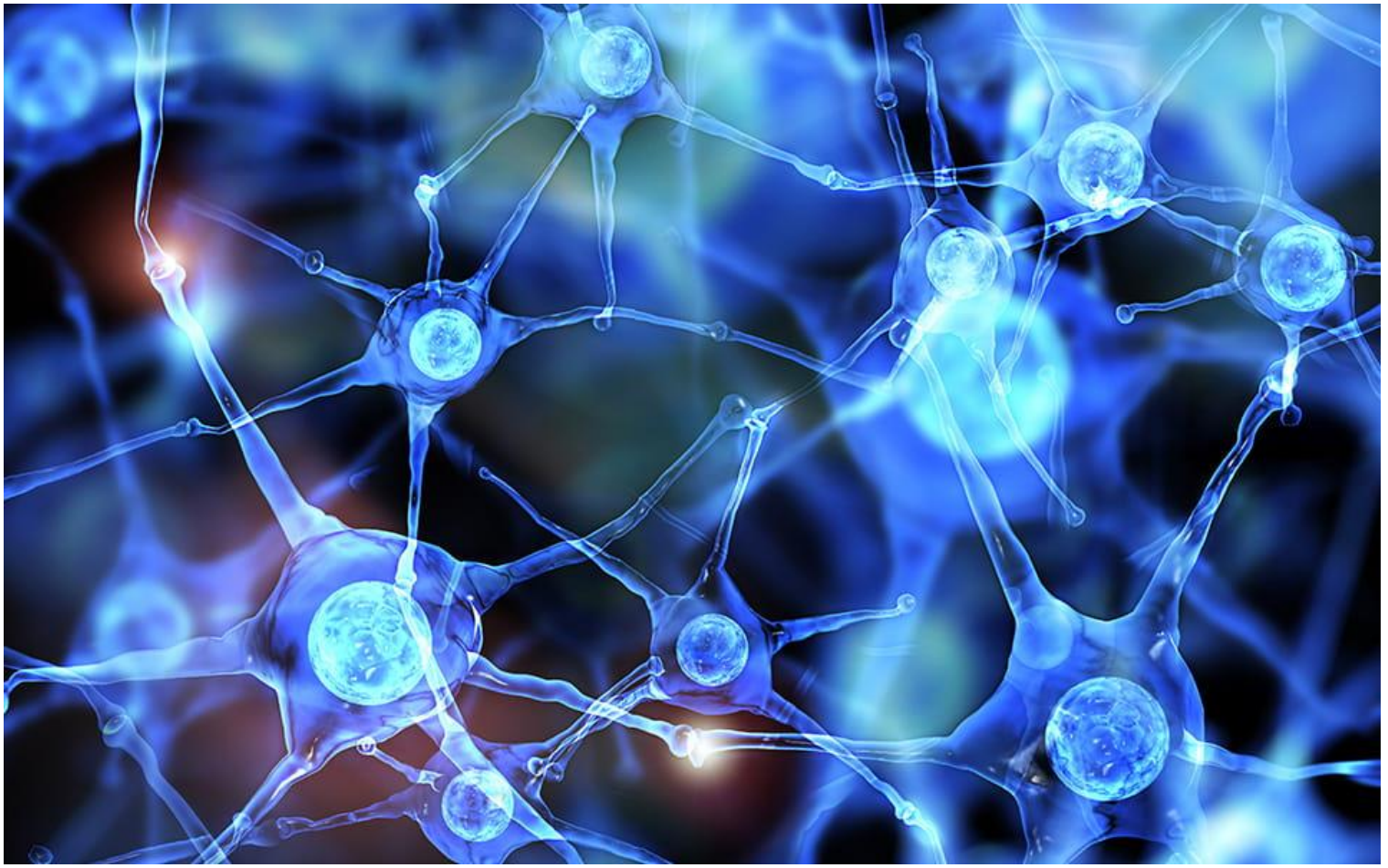
Heber Primary School

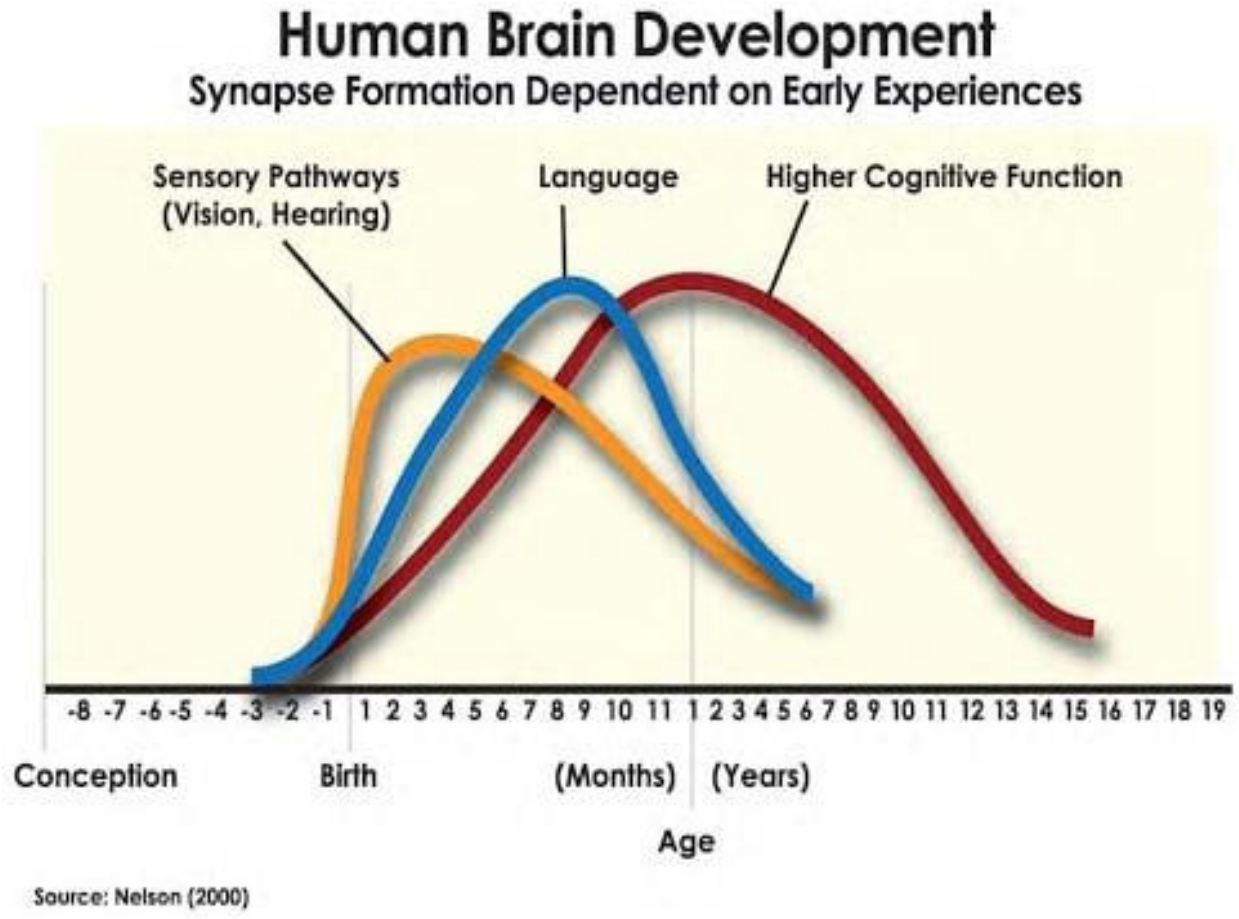
Parent Curriculum Guide

Mathematics in the Early Years 2025

How your child's brain works



Your child's brain will never develop as fast as it does from 0-5yo

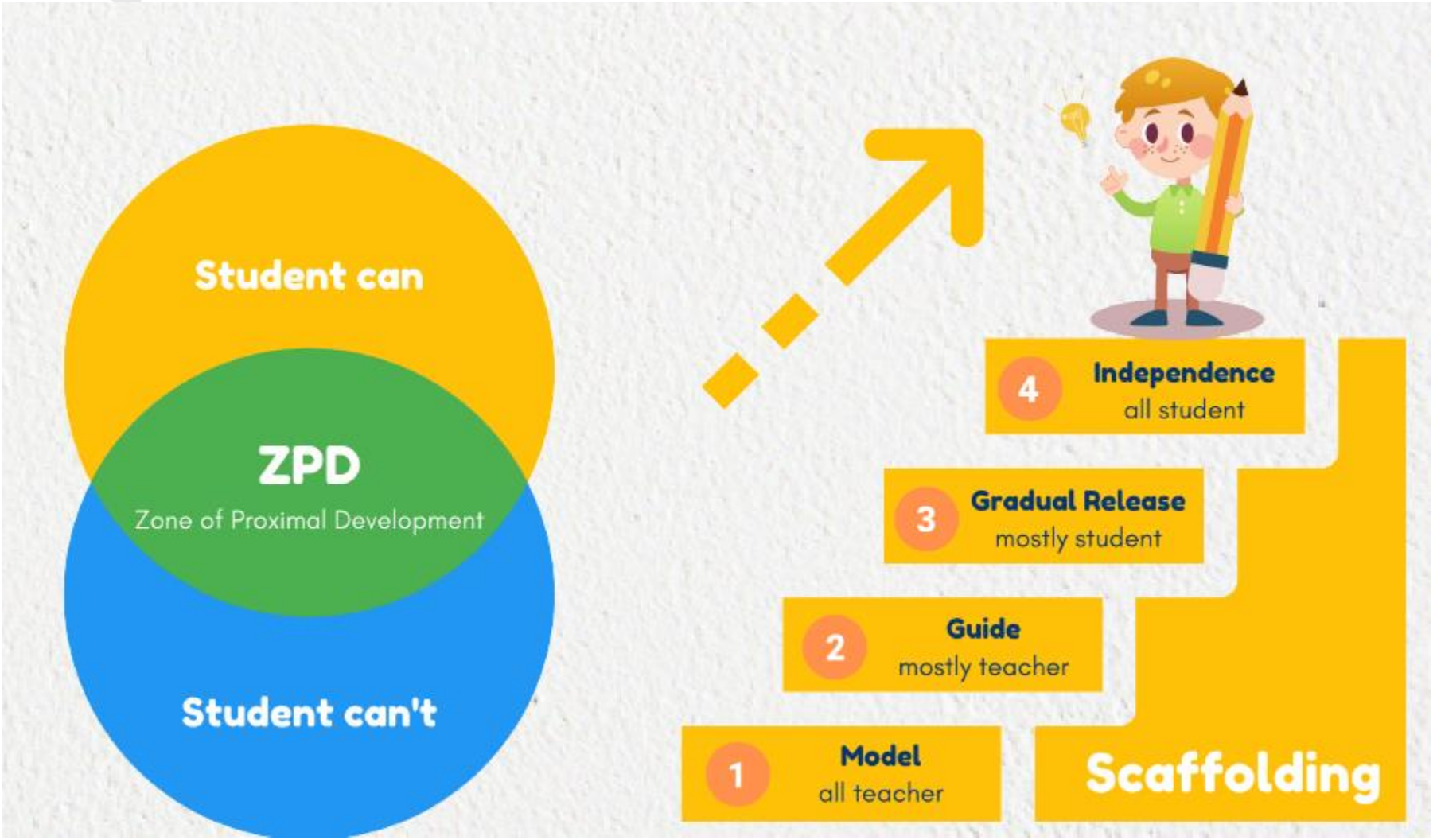


The science bit

"Recent scientific research has shown that the connections needed for many important, higher-level abilities – like motivation, self-regulation, problem solving, communication and self-esteem – are formed in these early years (0-5). Or not formed. And it's much harder for these essential brain connections to be made later in life."

*('**The First Five Years**' - firstthingsfirst.org)*

How we teach


Student can
ZPD
Zone of Proximal Development
Student can't
4
Independence
all student
3
Gradual Release
mostly student
2
Guide
mostly teacher
1
Model
all teacher
Scaffolding

How is Maths taught at school?

- Early years provision
- Daily Mastering Number sessions
- Small group games
- Whole class teaching (1 x White Rose session per week)
- Targeted interventions

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15
Autumn	*Mastering Number x 4*	**Settling In** - number songs, early subitising, number-based songs, Maths Baseline Assessments	**Settling In** - number songs, early subitising, number-based songs, Maths Baseline Assessments	**Perceptual Subitising** - avoiding counting to "check" up to 3	**Counting, cardinality and ordinality** - ways to find out 'how many' objects there are	**Composition** - investigating part-whole relations, how all numbers ar made of 1s, different ways to compose 3 and 4	**Subitising** - building perceptual, developing conceptual	**Comparison** - 'more than' and 'fewer than', developing estimating skills by 'just looking'	*Half Term*	**Counting, cardinality and ordinality** - reinforcing the 'last number' in the count tells us 'how many' there are	**Comparison** - 'more than' and 'fewer than', developing estimating skills by 'just looking'	**Composition** - exploring 'part'/'whole', continuing undrstanding of numbers within numbers	**Composition** - focussing on the composition of 3, 4 and 5	**Counting, ordinality and cardinality** - practising counting skills, matching numerals to quantities within 10	**Subitising** - subitise within 5 focusing on die patterns, matching numeral quantities within 5	**Catch up**
	White Rose x			Talk about measure and patterns Steps 1 & 2	Talk about measure and patterns Steps 3 & 4	Talk about measure and patterns Steps 5 & 6	Circles and triangles Steps 1 & 2	Circles and triangles Steps 3 & 4		Mass and capacity Steps 1 & 2	Mass and capacity Steps 3 & 4	Length, height and time Steps 1 & 2	Length, height and time Steps 3 & 4	Length, height and time Steps 5 & 6	Explore 3-D shapes Steps 1 & 2	Explore 3-D shapes Step 3
Spring	*Mastering Number x 4*	**Counting, ordinality and cardinality** - 'one more than the previous number'	**Composition** - focusing on what 'makes 5'	**Composition** - focusing on 6 & 7, '5 and a bit'	**Comparison** - more than, fewer than, equal to, making unequal sets equal	**Counting, ordinality and cardinality** - stable order principle, staircase pattern	**Comparison** - focus exclusively on ordinality	*Half Term*	**Composition** - part-part-whole	**Subitising** - visualising and 'seeing' equal groups	**Composition** - different attributes of groups, sorting and classifying	**Cardinality, ordinality and counting** - different counting strategies	**Subitising** - to 6, in structured arrangements	**Composition** - consolidating understanding of 5		
	White Rose x 2	Explore 3-D shapes Steps 4 & 5	Explore 3-D shapes Steps 6 & 7	To 20 and beyond Steps 1 & 2	To 20 and beyond Steps 3 & 4	To 20 and beyond Steps 5 & 6	How many now? Steps 1 & 2		How many now? Steps 3 & 4	Manipulate, compose and decompose Steps 1 & 2	Manipulate, compose and decompose Steps 3 & 4	Manipulate, compose and decompose Steps 5 & 6	Manipulate, compose and decompose Steps 7 & 8	Sharing and grouping Steps 1 & 2		
Summer	*Mastering Number x 4*	**Composition** - of numbers to 10	**Comparison** - link to ordinality, track games	**Subitising on a rekenrek**	**Review and assess** - automatic recall of bonds to 5	**Review and assess** - composition of numbers to 10	*Half Term*	**Review and assess** - comparison	**Review and assess** - number patterns	**Review and assess** - counting	**Catch up**	Consolidation				
	White Rose x 2	Sharing and grouping Step 3	Sharing and grouping Steps 4 & 5	Sharing and grouping Step 6. Visualise, build and map Step 1	Visualise, build and map Steps 2 & 3	Visualise, build and map Steps 4 & 5		Visualise, build and map Steps 6 & 7	Visualise, build and map Steps 8 & 9	Visualise, build and map Steps 10 & 11	Make connections Steps 1 & 2					

How will we assess your children at the end of Reception?

New Early Years Framework

In the EYFS curriculum, Mathematics is divided into the following areas:

Number
Numerical Patterns

There are no specific Early Goals for shape space and measure, but there are still the expectations that children:

"In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures" **Statutory framework for the early years foundation stage Department of Education 2021**

Early Learning Goals and Development checkpoints

Number

- ➔ Have a deep understanding of number to 10, including the composition of each number.
- ➔ Subitise (recognise quantities without counting) up to 5.
- ➔ Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and
- ➔ some number bonds to 10, including double facts.

Skills to develop:

- ➔ Count objects, actions and sounds.
- ➔ Subitise- recognise how many there are without having to count
- ➔ Link the number symbol (numeral) with its cardinal number value.
- ➔ Count beyond ten.
- ➔ Compare numbers.
- ➔ Understand the 'one more than/one less than' relationship between consecutive numbers.
- ➔ Explore the composition of numbers to 10.
- ➔ Automatically recall number bonds for numbers 0– 10.

Early Learning Goals and Development checkpoints

Numerical Patterns

- ➔ Verbally count beyond 20, recognising the pattern of the counting system.
- ➔ Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.
- ➔ Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally

Skills to Develop

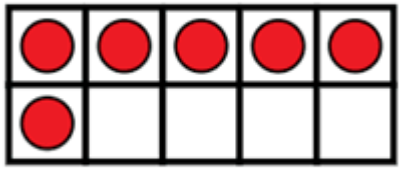
- ➔ Select, rotate and manipulate shapes in order to develop spatial reasoning skills.
- ➔ Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.
- ➔ Continue, copy and create repeating patterns.
- ➔ Compare length, weight and capacity.

Teaching strategies and methods

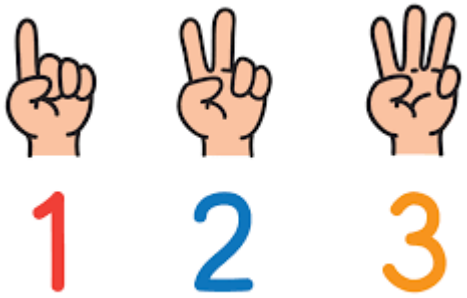
Number cards

Part Whole

10 Frame



Subitising



Loose part play

Concrete Pictorial and Abstract

Number Blocks is used across the Foundation stage. It is an excellent resource that supports children with counting, recognition and the relationship between numbers.

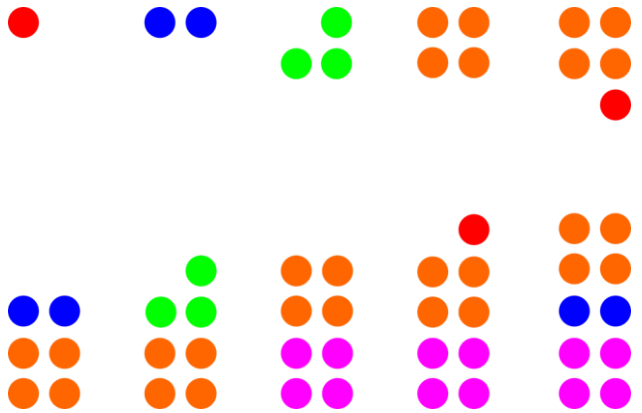
Number Blocks will be introduced number by number and Numicon will be introduced alongside.

Numicon is a visual representation for number which supports all learners.

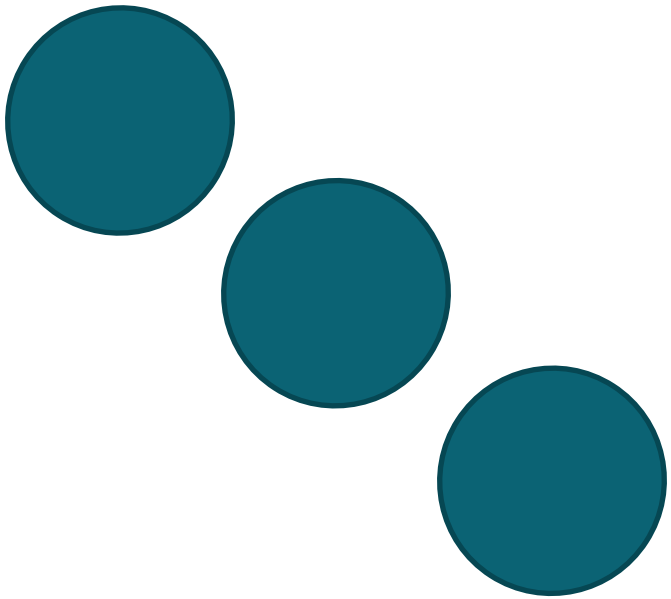
Subitising- What can you see?

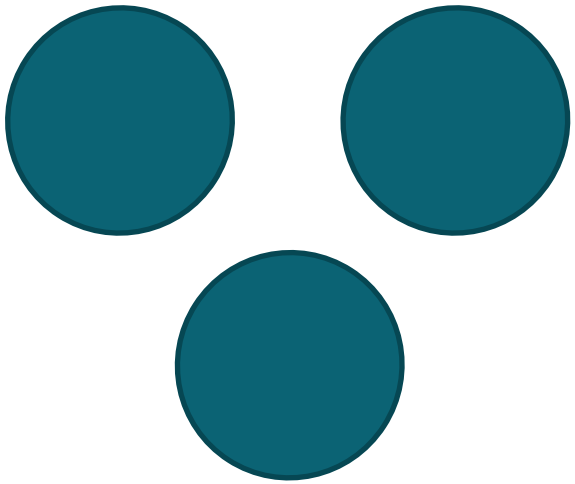
Subitising supports children in recognising amounts without counting, which support their composition of different numbers e.g. 3 is a 1 and a 1 and a 1, 3 is made of 1 and 2.

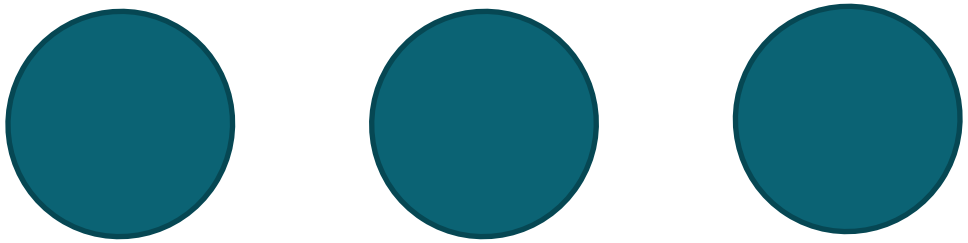
You can subitise with objects, dots, fingers. You need to build up speed which helps with quick recall.

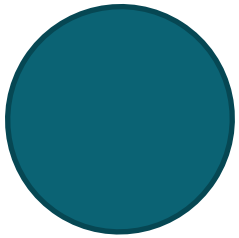


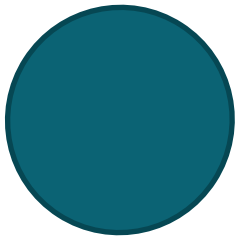
GAME TIME

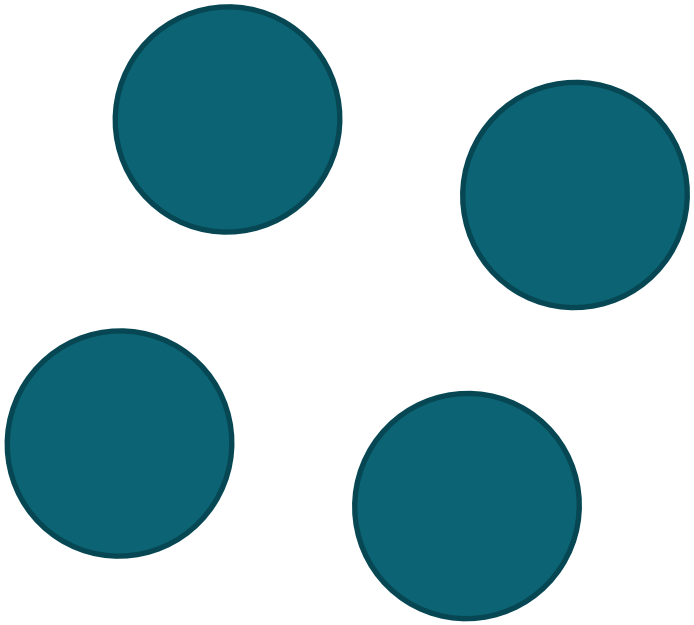


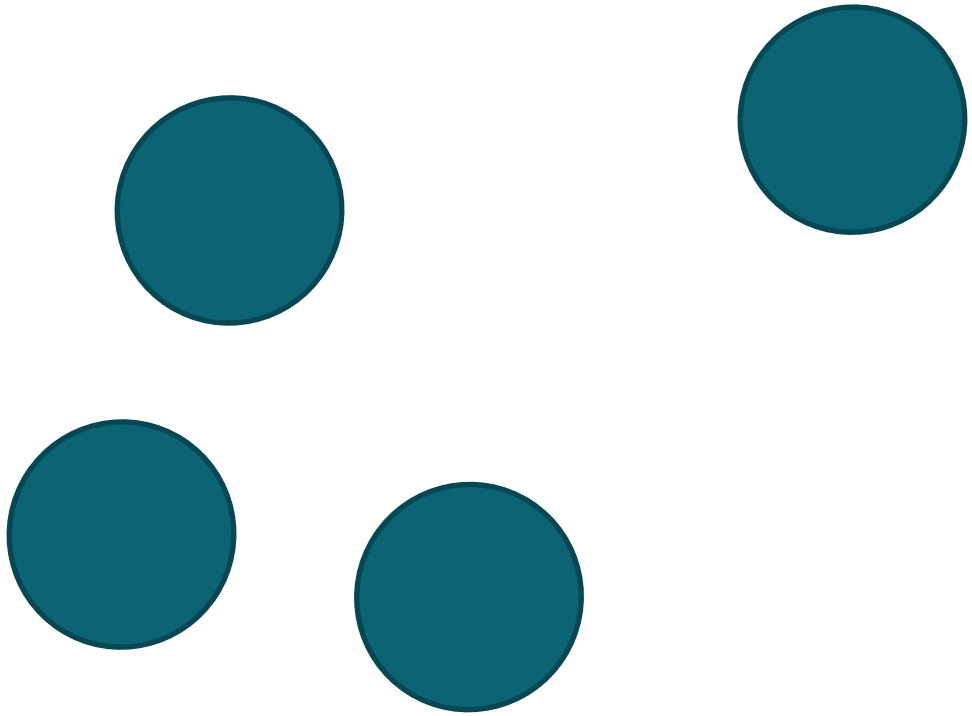




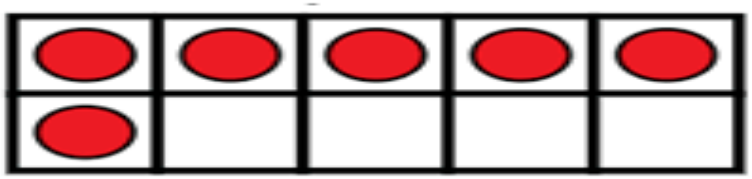


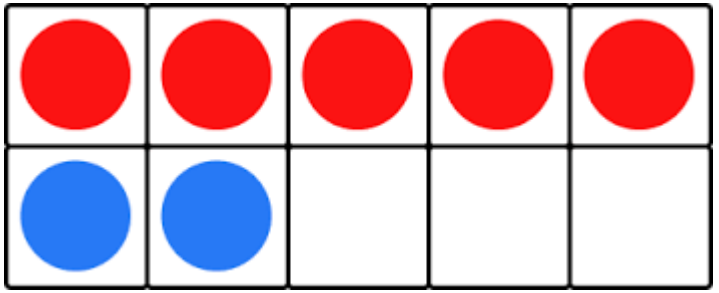


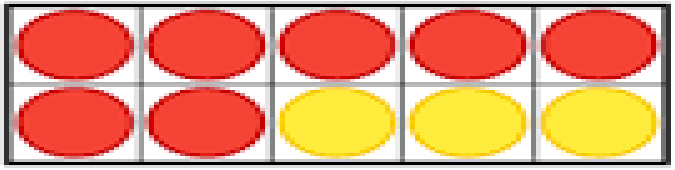




10 Frames



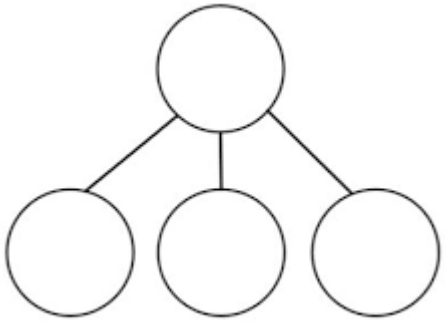




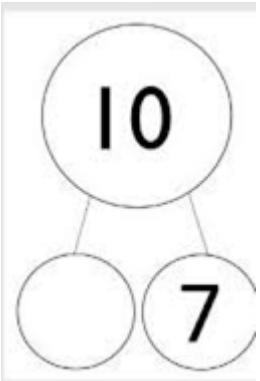
Recognising amounts on a 10 frame is a vital skill for Reception. It also helps with understanding how different number are made e.g. 7 is made of 5 and 2.

Part Whole- links to Number Bonds

Part whole will be used to learn number bonds to 10 e.g.
1+9=10
2+8= 10
3+7=10
4+6=10
5+5= 10 and more.



Part whole is looking at the composition of number. This is linked to additions. Children will be encouraged to explore all of the ways that a number can be made. E.g. 4= 2+2 4= 3+1



To develop calculating skills children will learn that a number/amount is not always made by just adding 2 groups. The will explore how many ‘parts’ can be added e.g. 5 is made of 5 1’s.

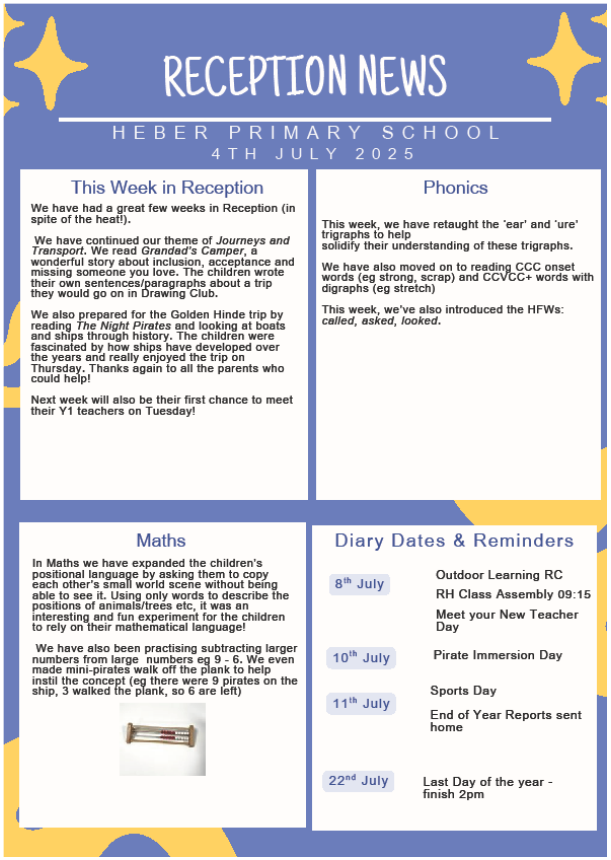
Number lines- counting on and backwards

Counting reliably orally and through the use of a number line is important. A number line can be used later for solving addition and subtraction problems. This is a good skill to model. Use an object to physically move an abject forwards or backwards depending on the calculation.

What can you do at home?

Every child will have a **Mathletics** log in and access to a **Google Classroom**.

Numberblocks app or games on cbeebies



RECEPTION NEWS

HEBER PRIMARY SCHOOL

4TH JULY 2025

This Week in Reception

We have had a great few weeks in Reception (in spite of the heat!).

We have continued our theme of *Journeys and Transport*. We read *Granded's Camper*, a wonderful story about inclusion, acceptance and missing someone you love. The children wrote their own sentences/paragraphs about a trip they would go on in Drawing Club.

We also prepared for the Golden Hinde trip by reading *The Night Pirates* and looking at boats and ships through history. The children were fascinated by how ships have developed over the years and really enjoyed the trip on Thursday. Thanks again to all the parents who could help!

Next week will also be their first chance to meet their Y1 teachers on Tuesday!

Phonics

This week, we have retaught the 'ear' and 'ure' trigraphs to help solidify their understanding of these trigraphs.

We have also moved on to reading CCC onset words (eg strong, scrap) and CCVCC+ words with digraphs (eg stretch)

This week, we've also introduced the HFWs: *called, asked, looked.*

Maths

In Maths we have expanded the children's positional language by asking them to copy each other's small world scene without being able to see it. Using only words to describe the positions of animals/trees etc, it was an interesting and fun experiment for the children to rely on their mathematical language!

We have also been practising subtracting larger numbers from large numbers eg 9 - 6. We even made mini-pirates walk off the plank to help instil the concept (eg there were 9 pirates on the ship, 3 walked the plank, so 6 are left)

Diary Dates & Reminders

8th July	Outdoor Learning RC RH Class Assembly 09:15 Meet your New Teacher Day
10th July	Pirate Immersion Day
11th July	Sports Day End of Year Reports sent home
22nd July	Last Day of the year - finish 2pm

Check advice on the *Reception Newsletter* (fortnightly)

Orchard Tree Maths games- shopping list, Bus stop etc.

Oldie but a goodie- Snakes and Ladders