# Our Maths Curriculum -EYFS

Newport Infant School

**Acorn Class –** Maths Overview

Opportunities yearly to ensure children develop the following mathematical concepts and skills. These will be developed through planned adult activities and in the REACH environment with every day engagement with the children – using the Kate Burton materials to support.

- Combine objects like stacking blocks and cups. – e.g. in the building area, at snack time
- Put objects inside others and take them out again
- Take part in finger rhymes with numbers. – daily counting and number rhyme experience
- React to changes of amount in a group of up to three items. – discuss during family group time, snack time, when building, when playing, in role-play
- Compare amounts, saying 'lots', 'more' or 'same'. – daily, at all opportunities e.g. snack times, building, maths area
- Develop counting-like behaviour, such as making sounds, pointing or saying some numbers in sequence. – modelled by staff daily and throughout
- Count in everyday contexts, sometimes skipping numbers - '1-2-3-5.' - modelled by staff daily and throughout
- Climb and squeeze themselves into different types of spaces. – PE time, outdoor time
- Build with a range of resources. – continuous construction provision
- Complete inset puzzles. – continuous provision and resources
- Compare sizes, weights etc. using gesture and language - 'bigger/ little/smaller', 'high/low', 'tall', 'heavy'.
- Notice patterns and arrange things in pattern

**Oak Class –** Maths Overview (based on number blocks, white rose and kate burton – supported by Master the Curriculum White Rose resources)

| Autumn Term | |
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| | **Focus** |
| Week 1 | Colours – primary |
| Week 2 | Colours |
| Week 3 | Matching – colour, |
| Week 4 | Matching – shape |
| Week 5 | Sorting |

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| Week 6 | Sorting |
| Week 7 | Number 1 |
| Week 8 | Number 2 subitising |
| Week 9 | Number 2 |
| Week 10 | Pattern – envbiornment and around |
| Week 11 | Pattern - AB |
| Week 12 | Consolidation |

| Spring Term | |
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| | **Focus** |
| Week 1 | Number 3 |
| Week 2 | Number 3 subitising |
| Week 3 | Number 4 |
| Week 4 | Number 4 composition |
| Week 5 | Number 5 |
| Week 6 | Number 5 composition |
| Week 7 | consolidation |
| Week 8 | Number 6 |
| Week 9 | Height and length |
| Week 10 | Mass |
| Week 11 | Capacity |
| Week 12 | Consolidation |

| Summer Term | |
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| | **Focus** |
| Week 1 | Sequencing |
| Week 2 | Positional language |
| Week 3 | More than/fewer |
| Week 4 | 2D shape |
| Week 5 | 3D shape |
| Week 6 | Consolidation |
| Week 7 | Number composition |
| Week 8 | What comes after? |
| Week 9 | What comes before? |
| Week 10 | Numbers to 5 |
| Week 11 | Consolidation |
| Week 12 | |

**Reception Maths Overview** – (Based on Kate Burton, White Rose Maths supported by NCETM Numberblocks)

**Rationale** – Each shape and coin is introduced with the corresponding number so children make links between numbers and their application in the real world. Children also identify where numbers are on an analogue clock to develop familiarity and as a precursor to telling the time in year 1.

Children need to develop fluency in mathematics, allowing them to develop reasoning and problem-solving skills. It is vital that opportunities are created in everyday routines and through an enabling environment to allow children opportunities to develop skills and knowledge in 4 key areas of mathematical development: Cardinality, Comparison, Counting and Composition.

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| Subitizing is practiced weekly throughout the year. When children are learning to subitise (recognise quantity without counting), it makes sense to talk about ways in which each number can be arranged and patterns in these arrangements. | | | |
| **AUTUMN TERM** | | | |
| **Week 1-3** | Assessment | | TRANSITION & BASELINE |
| **Week**<br>**(possible numberblocks links)** | **Mathematical Focus** | **Shape and Space links** | **Number and the Number system links** |
| **Week 4**<br>S1 Episodes 1 (One) | Introduce 1 | Circle<br>1 on the clock<br>1p | • Recognise 1<br>• Identify the quantity 1 (the oneness of 1)<br>• Recognise a 1p coin<br>• Find 1 on the clock<br>• Introduce a circle – with 1 side |
| **Week 5** | Grouping | Sorting into groups | • Sort objects based on colour / size / shape<br>• Investigate sorting the same objects in different ways<br>• Play Guess my Rule with objects you have sorted |
| **Week 6**<br>S1 Episodes 2 (Another One)<br>S1 Episodes 3 (Two) | Introduce 2 | 2 on the clock<br>2p | • Recognise 2<br>• Identify the quantity 2 (the twoness of 2)<br>• Know that 2 is 1 more than 1<br>• Know that 1 + 1 is 2<br>• Know that 2-1 is 1<br>• Recognise a 2p coin – understand it is equivalent to 2 x 1ps<br>• Find 2 on the clock<br>• Be able to continue 2 step repeating patterns |
| **Week 7** | Pattern | 2 step repeating patterns | |
| **Week 8**<br>S1 Episodes 4 (Three) | Introduce 3<br>Subitizing<br>Composition | Triangles<br>3 on the clock<br>3 step repeating patterns<br>3p | • Recognise 3<br>• Identify the quantity 3 (the threeness of 3)<br>• Know that 3 is 1 more than 2<br>• Know that 3 is 2 more than 1<br>• Know that 1 + 2 (or 2+1) is 3<br>• Know that 3-1 is 2 and 3-2 is 1<br>• Find 3 on the clock<br>• Understand number conservation – However you arrange the three objects, there are still 3 (use triangular arrangements and dice).<br>• Introduce different triangles with 3 sides.<br>• Be able to continue 3 step repeating patterns |
| **Week 9**<br>S1 Episodes 5 (One, Two, Three!) | Consolidate to 3<br>Composition – part whole | Triangles<br>3 on the clock<br>pattern | • Count to 3 – forwards and backwards using the 1 to 1, the stable order, the cardinal, the abstraction and the order-irrelevance principles. (see WRM)<br>• Compare numbers 1,2 and 3 – 'bigger' and 'smaller' |

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| | | | • Order numbers 1 to 3<br>• Know 3 is made of 2 and 1 or 1+1+1<br>• Know that 2 is 1 less than 3, 1 is 1 less than 2<br>• Count out 3 objects from a larger set.<br>• Use a 5 frame and recognise how many spaces there are when it contains 3 objects.<br>• Recognise which arrangements of objects contain a group of 3.<br>• There isn't a 3p coin – how can we pay 3p? |
| **Week 10**<br>S1 Episode 6 (Four)<br>S1 Episode 8 (Three Little Pigs) | Introduce 4<br>One more and one less | Quadrilaterals<br>4 on the clock | • Recognise 4<br>• Count out 4 objects from a larger group and recognize the structure of 4 as a square number and within a five frame Use different arrangements of 4 to explore number conservation.<br>• Recognise 4 items without counting (subitise)<br>• Count to 4 (forwards and backwards)<br>• Sequence numbers to 4<br>• Know that 4 is one more than 3<br>• Partition 4 into 3s, 2s and 1s and use the terms add and takeaway to describe the combinations.<br>• Find 4 on the clock<br>• Introduce a range of quadrilaterals and name the most common |
| **Week 11**<br>S1 Episodes 7 (Five)<br>S1 Episodes 9 (Off We Go!)<br>S1 Episodes 11 (Stampolines) | Introduce 5<br>Subitizing | | • Recognise 5<br>• Count out 5 objects from a larger group and look at ways of arranging (including using a dice arrangement and a 5 frame).<br>• Subitise to 5 (include instant recognition of number of fingers held up (to 5). Be able to hold up correct number of fingers without counting.<br>• Count forwards and backwards to 5 (encourage children to line up to count)<br>• Sequence numbers to 5. Identify missing numbers to 5. |
| **Week 12**<br>S1 Episode 10 (How to Count) | Consolidate to 5 | Pentagons<br>5 on the clock<br>5p<br>money | • Know that 5 is one more than 4<br>• Partition 5 in various ways using the vocabulary add and takeaway<br>• Find 5 on the clock<br>• Introduce a pentagon<br>• Recognise 5p and investigate its equivalence to 2ps and 1ps<br>• Use informal jottings to record numbers / quantities. |

| SPRING 1 | | | |
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| **Week 1**<br>S3 Episode 5 (Zero)<br><br>S3 Episode 1 (Once upon a Time)<br><br><br>S3 Episode 2 (Blockzilla) | Number bonds to 5 | • Consolidate recognition of 2D shapes with up to 5 sides (Circle, Semicircle, Triangle, Square, Rectangle, Pentagon)<br>• Consolidate sorting from Term 1 | • Explore partitioning a whole number into parts<br>• Recognise that even when partitioned, the total remains the same.<br>• Number bonds to 5Introducing the concept of zero<br>• Zero is 1 less than 1 and an absence of something<br>• A review of numbers 1 to 5 (including totaling values and coins)<br>• Comparison of numbers to 5 using the language of greater than and less than |
| **Week 2**<br>S3 Episode 3 (The Numberblocks Express)<br><br>S3 Episode 4 (Fruit Salad)<br><br><br>S4 Episode 2 (Pattern Palace) | Introduce 0<br>Number bonds to 5 | • Pattern<br>• My day Time up to 5 o'clock | • Composition of 5<br>• Partitioning and combining 5 in different ways<br>• Composition of numbers to 5<br>• Exploring the part, part-whole model to partition and combine numbers to 5<br><br>• Pattern |
| **Week 3**<br>S2 Episode 1 (Six)<br><br><br>S2 Episode 8 (Counting Sheep)<br>S3 Episode 18 (The Legend of Big Tum) | Counting to 6<br>The Six-ness of 6 | • Weight (use balances and Numicom for number bond equivalence)<br>• Introduce 6 o'clock<br>• Introduce hexagons | • Meet Six<br>• Counting (1 to 6)<br>• Subitising<br>• Exploring equivalent ways to represent 6<br>• Partitioning 6 into equal groups<br>• Factors of 6 |
| **Week 4**<br>S2 Episode 2 (Seven)<br><br><br>S2 Episode 12 (Fluffies) | 3D shapes | • Space & Pattern – 3Dshapes<br>• Introduce 7 o'clock<br>• Introduce heptagons<br>Counting to 7<br>• The Seven-ness of 7<br>• | • Meet Seven<br>• 7 is one more than 6<br>• Counting (1 to 7)<br>• Counting 1 to 8<br>• Number bonds within 7 |
| **Week 5**<br>S2 Episode 3 (Eight) | Counting to 8<br>The Eight-ness of 8 | • Introduce 8 o'clock<br>• Introduce octagons | • Meet Eight •<br>• Counting (1 to 8)<br>• 8 is one more than 7<br>• Subitising<br>• Partitioning 8 into equal group |

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| S2 Episode 9 (Double Trouble)<br>S3 Episode 14 (Octoblock to the Rescue) | | | • Pairs of numbers that total 8<br>• Estimation |
| **Week 6** | Length and measure | • Length and measure – link to number size, use rods to be measured and compared with Numberblocks and other measures<br>• | |
| **Week 7**<br>S2 Episode 4 (Nine)<br><br><br><br>S2 Episode 10 (The Three Threes)<br>S4 Episode 5 (The Wrong Number?)<br>S4 Episode 1 (Flatland) | Counting to 9<br>The Nine-ness of 9 | • Introduce 9 o'clock | • Meet Nine<br>• Counting (1 to 9)<br>• Partitioning and combining<br>• Partitioning 9 into 3 equal groups<br>• Partitioning is the inverse of combining |
| **Week 8**<br>S2 Episodes 5 (Ten)<br><br><br>S2 Episodes 6 (Just Add 1)<br><br>S3 Episode 7 (Numberblobs) | Counting to 10<br>The Ten-ness of 10 | | • Meet Ten<br>• Counting (1 to 10)<br>• 10 ones are equivalent to one 10.<br>• Adding 1<br>• Counting 1 to 10<br>• Counting to 10<br>• Ten frame<br>• Counting down from 10 |
| **Week 9**<br>S3 Episode 6 (Now we are 6 to 10)<br>S2 Episodes 15 (Ten Green Bottles)<br><br>S2 Episodes 7 (Blast Off) | Composition of 10 | • Introduce 10 o'clock<br>• Introduce decagons<br>• Introduce 10p coin and ways of making 10p with other coins | • A review of numbers 6 to 10<br>• Subtracting 1<br>• Counting (1 to 10)<br>• Counting down 10 to 1<br>• Count back from 10 to 1<br>• Number bonds that total 10<br>• Building with blocks and exploring space and pattern (to 10) Continue work on 10 as above |

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| | | | • Composition of 10 Combining two groups to find the whole<br>• Number bonds to 10 – ten frame<br>• Number bonds to 10 – part whole model<br>• Estimation<br>• Comparison of numbers to 10 using the language of 'bigger than' 'smaller than' leading to 'greater than' and 'less than'<br>• Comparison of numbers to 10 (greater than, less than and equals sign)<br>• Partitioning and combining numbers in different ways |
| **Week 10**<br>S2 Episodes 13 (The Two Tree)<br><br>S3 Episode 12 (Numberblock Rally)<br><br>S2 Episodes 11 (Odd & Evens) | Height and measure | • Height comparative language | • Reconsolidation through environment of skills to 10 as above<br>• reconsolidation |
| **Week 11**<br>S2 Episode 14 (Numberblock Castle)<br><br>S3 Episode 15 (Ten Again)<br><br>S3 Episode 8 (Building Blocks)<br><br>S4 Episode 4 (Mirror, Mirror) | Time – measuring time / sequence of day | Ways to measure time<br>Challenges for time<br>Sequencing the day<br>Time – related to things we do in the day yesterday, tomorrow, before, after | |
| **Week 12**<br>S3 Episode 9 (Peekaboo!)<br><br>S3 Episode 10 (Hiccups) | Time – o'clock | Time – clocks – oclock and half past | |

| SUMMER - Teens numbers | | | |
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| **Week 1**<br>S4 Episode 6 (Eleven) | Position language | • Introduce 11 o'clock<br>Positional language | • counting on and back<br>• Counting to 11<br>• The eleven-ness of 11 |
| **Week 2**<br>S4 Episode 7 (Twelve)<br><br>S4 Episode 10 (Blockstar)<br><br>S4 Episode 8 (The Way of the Rectangle)<br><br>S4 Episode 9 (Ride the Rays) | Capacity | • Capacity – language full, empty, half full, half empty<br>• Introduce 12 o'clock<br>• Rectangles | • Estimation – how many<br>• Counting to 12<br>The twelve-ness of 12<br>• Odd and even<br>• The fifteen-ness of fifteen<br>• Odd and even – link to estimation will it be odd or even amount<br>• Halving – halve the water in cup over two cups<br>• Doubling - Double the water amount what happens? |
| **Week 3**<br>S4 Episode 11 (Thirteen)<br><br>(could introduce Ten's Place in prep for next week) | Doubling | weight | • Doubling<br>• |
| **Week 4**<br>S4 Episode 12 (Fourteen)<br><br>S5 Episode 5 (Sixteen)<br>S5 Episode 6 (Square Club) | | Re cap 2D and 3D shape | • Sharing and halving<br>Odds and even<br>• Counting to 13<br>The thirteen-ness of 13<br>• Part-whole using weights |
| **Week 5**<br>S4 Episode 13 (Fifteen)<br>S4 Episode 14 (Tween Scenes)<br>S4 Episode 15 (Step Squads)<br>S5 Episode 1 (Fifteen Minutes of Fame)<br>S5 Episode 2 (On your Head)<br><br>S5 Episode 3 (Ten's Place) | halving<br>Sharing<br>Incl odds and evens<br>Recap 3D and 2D shape | | • Number of sides edges and faces, application in number<br>• Counting to 14<br>• The fourteen-ness of 14<br>• Reconsolidation of all facts<br>• Relate to odd and even number of sides in shapes (triangle odd, square even) |

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| S5 Episode 4 (Balancing Bridge) | | | |
| **Week 6**<br>S5 Episeode 5 (Sixteen) | Symmetry | Links to 3D and 2D shapes | • Counting to 16<br>• The sixtenn-ness of sixteen<br>• Composition – using 10 shapes to make symmetrical wings (5+5)<br>• Odd and even – can we use 3 shapes to make symmetrical wings?<br>• Halving and doubling |
| Week 7<br>S5 Episode 7 (Seventeen) | Money | 1p, 2p, 5p and 10p | 1p 2p 5p 10p = relate to addition, subtraction, doubling and halving<br><br>Composition/bonds – how can we make 5p, 10p |
| Week 8<br>S5 Episode 8 (Eighteen) | Weight | Weight – comparative language | Composition and bonds – part whole method using weights. Make the whole number<br>Doubling and halving – have objects using weights |
| Week 9<br>S5 Episode 9 (Loop the Loop – up to 18) | Problem solving | Reconsolidation and application | |
| Week 10<br>S5 Episode 10 (Nineteen) | Assessment | | |