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| **Term** | **Week 1** | **Week 2** | **Week 3** | | **Week 4** | | | **Week 5** | **Week 6** | **Week 7** | **Week 8** |  | **Week 1** | **Week 2** | | **Week 3** | | | **Week 4** | **Week 5** | **Week 6** | | **Week 7** | | **Week 8** | | **Week 9** |
| **Autumn 1 – 8 Weeks** | | | | | | | | | | | | **Autumn 2 – 9 Weeks** | | | | | | | | | | | | | | |
|  | | | **Pixl Paper Testing Window (Paper 1)** | | | | | |  | | **Start of** | **Pixl Y2 Testing Window (2018 Paper)** | | | | | | | **Y2 QLA Deadline** | **Y2 IFT Reports** | |  | | | | |
|  | | |  | | | | | | **Pixl Y3-5 Testing Window** | | |  | | | | | | |  | | | | | | | |
|  | | | | | | | | | **Y6 QLA Deadline** | **Y6 IFT Reports** |  | **Y3-5 QLA Deadline** | **Y3-5 IFT Reports** | | **Pixl Y6 Testing Window (2017 Paper)** | | | | | **Y6 QLA Deadline** | | | **Y6 IFT Reports** | |  | |
| **Autumn** | **Number: Place Value**  **(Within 10)**  **4 weeks**  **Small Steps: 14**  **NCETM Spine:** [**1.1**](https://www.ncetm.org.uk/resources/50699) **(comparison context)**  [**1.3**](https://www.ncetm.org.uk/resources/50720)**, (numbers 0-5) and** [**1.4**](https://www.ncetm.org.uk/resources/50721)**(numbers 6-10)**  ***Note: part-whole shows up in*** [***1.2***](https://www.ncetm.org.uk/resources/50719) ***which could be used before*** [***1.3***](https://www.ncetm.org.uk/resources/50720) | | | | | | **Number: Addition & Subtraction**  **(Within 10)**  **5 Weeks**  **Small Steps: 16**  **NCETM Spine:** [**1.2**](https://www.ncetm.org.uk/resources/50719) **(part whole model)** [**1.5**](https://www.ncetm.org.uk/resources/50722)**,** [**1.6**](https://www.ncetm.org.uk/resources/50723)**,** [**1.7**](https://www.ncetm.org.uk/resources/50724) | | | | **Consolidation/**  **Assessment** | **Number: Addition & Subtraction**  **(Within 10)**  **5 Weeks** | | | **Geometry: Shape**  **1 Week**  **Small Steps: 5**  **NCETM Spine: N/A** | | | **Number: Place Value (Within 20)**  **2 Weeks**  **Small Steps: 8**  **NCETM Spine:** [**1.10**](https://www.ncetm.org.uk/resources/50727) **(TP 1 and 2)** | | **Consolidation/**  **Assessment** | | | **Number: Addition & Subtraction**  **(Within 20)**  **3 Weeks**  **Small Steps: 8**  **NCETM Spine:** [**1.10**](https://www.ncetm.org.uk/resources/50727) **and 1.11** | | | |
| **Spring 1 – 6 Weeks** | | | | | | | | | |  |  | **Spring 2 – 7 Weeks** | | | | | | | | | | | | |
|  | | | **Pixl Y1 Testing Window** | | | | | | | **Y1 QLA Deadline** | **Y1 IFT Reports** | |  | | | | | | | | | |
|  | | | | **Pixl Y3-5 Testing Window** | | | | | |  | | **Pixl Y2 Testing Window (2019 Paper)**  **Pixl Y6 Testing Window (2019 Paper)** | | | | | **Y2 & Y6 QLA Deadline** | **Y2 & Y6 IFT Reports** | |  | |
|  | | | **Pixl Y6 Testing Window (2018 Paper)** | | | | | **Y6 QLA Deadline** | **Y6 IFT Reports** | **Pixl Y3-5 Testing Window** | | **Y3-5 QLA Deadline** | **Y3-5 IFT Reports** | | |  | | | | | | |
| **Spring** | **Number: Place Value (Within 50)**  **3 Weeks**  **Small Steps: 9**  **NCETM Spine:** [**1.9**](https://www.ncetm.org.uk/resources/50726)**,** [**2.1**](https://www.ncetm.org.uk/resources/52889) | | | | **Measurement: Length & Height**  **2 Weeks**  **Small Steps: 3**  **NCETM Spine:** [**1.1**](https://www.ncetm.org.uk/resources/50699) | | | | **Consolidation/**  **Assessment** |  | **Measurement:**  **Weight & Volume**  **2 Weeks**  **Small Steps: 6**  **NCETM Spine:** [**1.1**](https://www.ncetm.org.uk/resources/50699) | | | **Number: Multiplication & Division**  **3 Weeks**  **Small Steps: 9**  **NCETM Spine:** [**2.1**](https://www.ncetm.org.uk/resources/52889) **(TP 1-3) could also ref back to** [**1.8**](https://www.ncetm.org.uk/resources/50725) **TP 2** | | | | | | **Consolidation/**  **Assessment** | |  | |
| **Summer 1 – 5 Weeks** | | | | | | | | |  |  | **Summer 2 – 5 Weeks** | | | | | | | |
|  | | | | | | **Pixl Y1 Testing Window** | | |  | **Pixl Y1 Testing Window** | | | | **Y1 QLA Deadline** | | **Y1 IFT Reports** |  |
|  | | | | | | **Pixl Y3-5 Testing Window** | | |  | **Pixl Y3-5 Testing Window** | | | | | | **Y3-5 QLA Deadline** | **Y3-5 IFT Reports** |
| **Summer** | **Number: Fractions**  **2 Weeks**  **Small Steps: 4**  **NCETM:** [**Key Stage 1**](https://www.ncetm.org.uk/resources/53655)  **Year 1: Halving shapes or objects**  **Year 1: Find a quarter of a shape or object** | | **Number: Place Value (Within 100)**  **2 Weeks**  **Small Steps: 6**  **NCETM Spine:** [**1.9**](https://www.ncetm.org.uk/resources/50726) | | | | | **Consolidation/**  **Assessment** |  | | | **Geometry: Position & Direction**  **1 Week**  **Small Steps: 3**  **NCETM Spine: N/A** | **Measurement: Money**  **1 Week**  **Small Steps: 3**  **NCETM Spine:** [**2.1**](https://www.ncetm.org.uk/resources/52889) **(TP 4 – 6)** | | | | **Measurement: Time**  **2 Weeks**  **Small Steps: 6**  **NCETM Spine: N/A** | | **Consolidation/**  **Assessment** |

YEAR 1 – KS1 Mathematics Curriculum Map 2021-22

**Year 1 National Curriculum Objectives, White Rose Small Steps & NCTEM Spine Teaching Points**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Autumn** | **Place Value (Within 10) – 4 Weeks** | **Addition & Subtraction (Within 10) - 5 Weeks** | | **Geometry: Shape - 1 Week** | **Number & Place Value (Within 20) –**  **2 Weeks** | | | **Addition & Subtraction (Within 20) - 3 Weeks** | |
| **National Curriculum Objectives** | * 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 2s, 5s and 10s * given a number, identify 1 more and 1 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 | * 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 0 * solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? − 9 | | * 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] | * 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 2s, 5s and 10s * given a number, identify 1 more and 1 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 | | | * 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 0 * solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? − 9 | |
| **White Rose Small steps** | * Sort objects * Count objects * Represent objects * Count, read and write forwards from any number 0 to 10 * Count, red and write backwards from any number 0 to 10 * Count one more * Count on less * One-to-one correspondence to start to compare groups * Introduce <,> and = symbols * Compare numbers * Order groups of objects * Order numbers * Ordinal numbers (1st, 2nd, 3rd…) * The number line | * Part-whole model * Addition symbols * Fact families * Find number bonds for numbers within 10 * Systematic methods for number bonds within 10 * Compare number bonds * Addition – adding together * Addition – adding more * Finding a part * Subtraction – taking away, how many left? Crossing out * Subtraction – finding a part, breaking apart * Fact families – the 8 facts * Subtraction – counting back * Subtraction – finding the difference * Comparing addition and subtraction statements e.g. a+b > c * Comparing addition and subtraction statements e.g. a+b > c+d | | * Recognise and name 3-D shapes * Sort 3-D Shapes * Recognise and name 2-D Shapes * Sort 2-D shapes * Patterns with 3-D and 2-D shapes | * Count forwards and backwards and write numbers to 20 in numerals and words * Numbers 11 to 20 * Tens and ones * Count one more and one less * Compare groups of objects * Compare numbers * Order groups of objects * Order numbers | | | * Add by counting on * Find & make number bonds * Add by making 10 * Subtraction – Not crossing 10 * Subtraction – Crossing 10 (1) * Subtraction Crossing 10 (2) * Related facts * Compare number sentences | |
| **NCTEM Spine Teaching Points** | **1.1. – Comparison of quantities and measures**  Explore the relationship between numbers and introduce children to the important concept of equivalence; focus on the correct use of comparative language, as well as use of mathematical symbols (<, = and >)  **1.3 - Composition of numbers: 0-5**  Apply the partitioning structure to the numbers to five, and introduce children to new concepts such as subitising, ordinality and the bar model.  **1.4 – Composition of numbers 6 -10**  Extend the partitioning structure to the numbers six to ten, explore the five-and-a-bit structure of the numbers, and introduce children to the concept of odd and even numbers. | **1.2 – Introducing ‘whole’ and ‘parts’: part-part-whole model**  Introduce children to the concept of partitioning, which underpins many of the subsequent segments, and build towards use of the part–part–whole model.  **1.5 – Additive structures: introduce to aggregation and partitioning**  Progress to the use of abstract notation (+, − and =) as a way of representing the part–part–whole structure.  **1.6 – Additive structures: introduce to augmentation and reduction**  Introduce children to addition as augmentation, and subtraction as reduction (take away), using a ‘*first…, then…, now…*’ story representation and abstract notation (+, − and =); explore the inverse nature of the two operations.  **1.7 – Addition and subtraction: strategies within 10**  Equip children with a range of useful strategies for addition within ten, including adding and subtracting zero and one, commutativity, adding and subtracting two to/from odd and even numbers, and doubling and halving. | | **N/A** | **1.10 – Composition of numbers 11-19**  Explore the ten-and-a-bit nature of the numbers 11–19, using the partitioning structure; apply number facts within ten to addition and subtraction of single-digit numbers to/from the numbers 11–19. | | | **1.10 – Composition of numbers 11-19**  Explore the ten-and-a-bit nature of the numbers 11–19, using the partitioning structure; apply number facts within ten to addition and subtraction of single-digit numbers to/from the numbers 11–19.  **1.11 – Addition and subtraction bridging 10**  Apply the aggregation and augmentation structures of addition to three single-digit numbers, exploring commutativity and associativity, to work towards strategies for adding and subtracting across ten. | |
| **Spring** | **Number & Place Value**  **(Within 50) – 3 Weeks** | | **Measurement: Length & Height – 2 Weeks** | **Measurement: Weight & Volume – 2 Weeks** | | **Number: Multiplication & Division – 3 Weeks** | | | |
| **National Curriculum Objectives** | * 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 2s, 5s and 10s * given a number, identify 1 more and 1 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 | | * 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] | * 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) | | * count in multiples of twos, fives and tens * 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 | | | |
| **White Rose Small steps** | * Numbers to 50 * Tens and ones * Represent numbers to 50 * One more one less * Compare objects within 50 * Compare numbers within 50 * Order numbers within 50 * Count in 2s * Count in 5s | | * Compare lengths and heights * Measure length (1)   Measure length (2) | * Introduce weight and mass * Measure mass * Compare mass * Introduce capacity and volume * Measure capacity * Compare capacity | | * Count in 2s * Count in 5s * Count in 10s * Make equal groups * Add equal groups * Make arrays * Make doubles * Make equal groups – grouping * Make equal groups – sharing | | | |
| **NCTEM Spine Teaching Points** | **1.9 – Composition of numbers 20 – 100**  Build on multiples of ten, by introducing non-zero values in the ones place; apply the partitioning structure to these two-digit numbers, decomposing them into tens and ones.  **2.1 – Counting, unitising and coins**  Explore the concept of unitising by counting in units of two, five or ten; investigate how objects can be counted efficiently by counting in units other than one; apply unitising in the context of the low-denomination coins (1 p, 2 p, 5 p and 10 p). | | **1.1. – Comparison of quantities and measures**  Explore the relationship between numbers and introduce children to the important concept of equivalence; focus on the correct use of comparative language, as well as use of mathematical symbols (<, = and >) | **1.1. – Comparison of quantities and measures**  Explore the relationship between numbers and introduce children to the important concept of equivalence; focus on the correct use of comparative language, as well as use of mathematical symbols (<, = and >) | | **2.1 – Counting, unitising and coins**  Explore the concept of unitising by counting in units of two, five or ten; investigate how objects can be counted efficiently by counting in units other than one; apply unitising in the context of the low-denomination coins (1 p, 2 p, 5 p and 10 p).  **1.8 – Composition of numbers: multiples of 10 up to 100**  Explore multiples of ten, including counting in tens to 100; apply number facts within ten to addition and subtraction for multiples of ten | | | |
| **Summer** | **Number: Fractions – 2 Weeks** | | **Number & Place Value**  **(Within 100) – 2 Weeks** | **Geometry: Position & Direction – 1 Week** | | **Measurement: Money – 1 Week** | **Measurement: Time – 2 Weeks** | |
| **National Curriculum Objectives** | * recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity * recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity | | * 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 2s, 5s and 10s * given a number, identify 1 more and 1 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 | * describe position, direction and movement, including whole, half, quarter and three quarter turns | | * recognise and know the value of different 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 | |
| **White Rose Small steps** | * Find a half (1) * Find a half (2) * Find a quarter (1) * Find a quarter (2) | | * Counting forwards and backwards within 100 * Partitioning numbers * Comparing numbers (1) * Comparing numbers (2) * Ordering numbers * One more, one less | * Describe turns * Describe position (1) * Describe position (2) | | * Recognising coins * Recognising notes * Counting coins | * Before and after * Dates * Time to the hour * Time to the half hour * Writing time * Comparing time | |
| **NCTEM Spine Teaching Points** | **NCETM: Key Stage 1**  Cover the Key Stage 1 statutory requirements for fractions, including recognising, finding, naming and writing one-quarter, one-third, one-half/two-quarters, and three-quarters of an object, shape or quantity.  Year 1: Halving shapes or objects  Year 1: Find a quarter of a shape or object | | **1.9 – Composition of numbers 20 – 100**  Build on multiples of ten, by introducing non-zero values in the ones place; apply the partitioning structure to these two-digit numbers, decomposing them into tens and ones. | **N/A** | | **2.1 – Counting, unitising and coins**  Explore the concept of unitising by counting in units of two, five or ten; investigate how objects can be counted efficiently by counting in units other than one; apply unitising in the context of the low-denomination coins (1 p, 2 p, 5 p and 10 p). | **N/A** | |