## Year 6



Welcome to our lesson by lesson overview for 2020-21. This has been designed to give schools a clear progression to follow in case a blended learning approach is needed.

We have taken into account potential lost learning during the lockdown period by adding in recap lessons. These are indicated with an R

Each lesson will link to a video tutorial produced by one of our maths specialists which can be used in a variety of ways:

- ✓ at home if classes, local areas or everyone goes into lockdown
- ✓ in small groups during intervention sessions
- ✓ with TAs or learning assistants, particularly with mixed age classes
- ✓ on tablets to promote independent learning.

All the videos are freely available and most of them are linked to a worksheet that will be available through the premium website. We will also make the non-voiced over PowerPoint version of the video available to use as a front of class teaching tool.

For those lessons that say 'activity', the activity will be explained through the video. You will notice that some lessons are repeated. This happens with some key concepts as children may need more time to embed their learning.

For example there are two lessons on 'Finding the difference' in year 1.

| Monday  | Subtraction - finding the difference | NF-1 AS-2 |
|---------|--------------------------------------|-----------|
| Tuesday | Subtraction - finding the difference | NF-1 AS-2 |

We have linked our lessons to the DFE ready to progress criteria to help you plan and see where to prioritise learning. You can find the full guidance document <a href="here">here</a> which includes the meanings of each code.

**Release dates** – our videos and front of class PowerPoints will be released over the year in line with this progression. We recommend, if you are using this, to use the dates we have provide.

### Year 6 – Autumn Term

# White Rose Maths

#### Lesson by lesson overview 2020/21

| Week                   | Day       | Topic   |         |
|------------------------|-----------|---|---------|
|                        | Monday    | Numbers to 10,000                                   | NPV-2   |
| 1                      | Tuesday   | Numbers to 100,000                                  | NPV-2 🔃 |
|                        | Wednesday | Numbers to a million                                | NPV-2 🔃 |
| 07/09/2020             | Thursday  | Numbers to 10 million                               | NPV-2   |
|                        | Friday    | Compare and order any number                        | NPV-3   |
|                        | Monday    | Round numbers to 10, 100 and 1,000                  | NPV-3 R |
| 2                      | Tuesday   | Round any number                                    | NPV-3   |
|                        | Wednesday | Negative numbers (in context)                       | NPV-3   |
| 14/09/2020             | Thursday  | Negative numbers (more abstract)                    | NPV-3   |
|                        | Friday    | Mini-assessment                                     |         |
|                        | Monday    | Add whole numbers with more than 4 digits           | R       |
| 3                      | Tuesday   | Subtract whole numbers with more than 4 digits      | R       |
|                        | Wednesday | Inverse operations (addition and subtraction)       | R       |
| 21/09/2020             | Thursday  | Multi-step addition and subtraction problems        | R       |
|                        | Friday    | Add and subtract integers                           |         |
| <b>4</b><br>28/09/2020 | Monday    | Multiply 4-digits by 1-digit                        | R       |
|                        | Tuesday   | Multiply 2-digits (area model)                      | R       |
|                        | Wednesday | Multiply 2-digits by 2-digits                       | R       |
|                        | Thursday  | Multiply 3-digits by 2-digits                       | R       |
|                        | Friday    | Multiply up to a 4-digit number by a 2-digit number |         |

| Week       | Day       | Topic                               |         |
|------------|-----------|-------------------------------------|---------|
| E          | Monday    | Divide 4-digits by 1-digit          | R       |
|            | Tuesday   | Divide with remainders              | R       |
| 5          | Wednesday | Short division                      |         |
| 05/10/2020 | Thursday  | Division using factors              |         |
|            | Friday    | Long division (1)                   |         |
|            | Monday    | Long division (2)                   |         |
| 6          | Tuesday   | Long division (3)                   |         |
|            | Wednesday | Long division (4)                   |         |
| 12/10/2020 | Thursday  | Factors                             | R       |
|            | Friday    | Common factors                      |         |
|            | Monday    | Common multiples                    |         |
| 7          | Tuesday   | Primes to 100                       |         |
|            | Wednesday | Squares and cubes                   |         |
| 19/10/2020 | Thursday  | Order of operations                 |         |
|            | Friday    | Mental calculations and estimation  |         |
|            | Monday    | Reason from known facts             | AS-2    |
| 8          | Tuesday   | Mini-assessment                     |         |
|            | Wednesday | Equivalent fractions                | F-1 (R) |
| 02/11/2020 | Thursday  | Simplify fractions                  | F-1     |
|            | Friday    | Improper fractions to mixed numbers | F-1 (R) |
| 9          | Monday    | Mixed numbers to improper fractions | F-1 (R) |
|            | Tuesday   | Fractions on a number line          | F-1     |
|            | Wednesday | Compare and order (denominator)     | F-2/3   |
|            | Thursday  | Compare and order (numerator)       | F-2/3   |
|            | Friday    | Add and subtract fractions (1)      |         |

| Week                    | Day  | Topic                                  |
|-------------------------|--|--|
|                         | Monday   | Add and subtract fractions activity    |
| 10                      | Tuesday  | Add and subtract fractions (2)         |
| 10                      | Wednesday  | Add mixed numbers                      |
| 16/11/2020              | Thursday   | Add fractions                          |
|                         | Friday   | Subtract mixed numbers                 |
|                         | Monday   | Subtract fractions                     |
| 11                      | Tuesday  | Mixed addition and subtraction         |
|                         | Wednesday  | Multiply fractions by integers         |
| 23/11/2020              | Thursday   | Multiply fractions by fractions        |
|                         | Friday   | Divide fractions by integers (1)       |
|                         | Monday   | Divide fractions by integers (2)       |
| 12                      | Tuesday  | Four rules with fractions              |
|                         | Wednesday  | Fraction of an amount                  |
| 30/11/2020              | Thursday   | Fraction of an amount - find the whole |
|                         | Friday   | Mini-assessment                        |
|                         | Monday   | The first quadrant                     |
| 13                      | Tuesday  | Four quadrants                         |
| 13                      | Wednesday  | Translations                           |
| 07/12/2020              | Thursday   | Reflections                            |
|                         | Friday   | Mini-assessment                        |
| <b>14</b><br>14/12/2020 | Activity week. This week we will be providing some themed activities linking to the learning from this term. |  |



## Year 6 - Spring Term



#### Lesson by lesson overview 2020/21

| Week       | Day       | Topic                          |
|------------|-----------|--------------------------------|
|            | Monday    | Decimals up to 2 d.p. NPV-2    |
| 1          | Tuesday   | Understand thousandths NPV-2 R |
|            | Wednesday | Three decimal places NPV-2     |
| 04/01/2021 | Thursday  | Multiply by 10, 100 and 1,000  |
|            | Friday    | Divide by 10, 100 and 1,000    |
|            | Monday    | Multiply decimals by integers  |
| 2          | Tuesday   | Divide decimals by integers    |
|            | Wednesday | Division to solve problems     |
| 11/01/2021 | Thursday  | Decimals as fractions          |
|            | Friday    | Fractions to decimals (1)      |
|            | Monday    | Fractions to decimals (2)      |
| 3          | Tuesday   | Mini-assessment                |
|            | Wednesday | Understand percentages         |
| 18/01/2021 | Thursday  | Fractions to percentages       |
|            | Friday    | Equivalent FDP                 |
|            | Monday    | Order FDP                      |
|            | Tuesday   | Percentage of an amount (1)    |
| 4          | Wednesday | Percentage of an amount (2)    |
| 25/01/2021 | Thursday  | Percentages (missing values)   |
|            | Friday    | Mini-assessment                |

| Week       | Day       | Topic                           |      |
|------------|-----------|---------------------------------|------|
| 5          | Monday    | Find a rule - one step          |      |
|            | Tuesday   | Find a rule - two step          |      |
|            | Wednesday | Forming expressions             |      |
| 01/02/2021 | Thursday  | Substitution                    |      |
|            | Friday    | Formulae                        |      |
|            | Monday    | Forming equations               |      |
| 6          | Tuesday   | Solve simple one-step equations |      |
|            | Wednesday | Solve two-step equations        |      |
| 08/02/2021 | Thursday  | Find pairs of values (1)        | MD-4 |
|            | Friday    | Find pairs of values (2)        | MD-4 |
|            | Monday    | Metric measures                 |      |
| 7          | Tuesday   | Convert metric measures         |      |
| (          | Wednesday | Calculate with metric measures  |      |
| 22/02/2021 | Thursday  | Miles and kilometres            |      |
|            | Friday    | Imperial measures               |      |
|            | Monday    | Shapes - same area              | G-1  |
| 8          | Tuesday   | Area and perimeter              | G-1  |
| 0          | Wednesday | Area of a triangle (1)          | G-1  |
| 01/03/2021 | Thursday  | Area of a triangle (2)          | G-1  |
|            | Friday    | Area of a triangle (3)          | G-1  |
| 9          | Monday    | Area of a parallelogram         | G-1  |
|            | Tuesday   | What is volume?                 | R    |
|            | Wednesday | Volume - counting cubes         |      |
|            | Thursday  | Volume of a cuboid              |      |
|            | Friday    | Mini-assessment                 |      |

| Week                    | Day       | Topic                             |      |
|-------------------------|-----------|-----------------------------------|------|
|                         | Monday    | Using ratio language              | MD-3 |
| 10                      | Tuesday   | Ratio and fractions               | MD-3 |
| 10                      | Wednesday | Introducing the ratio symbol      | MD-3 |
| 15/03/2021              | Thursday  | Calculating ratio activity        | MD-3 |
|                         | Friday    | Calculating ratio                 | MD-3 |
|                         | Monday    | Using scale factors               | MD-3 |
| 11                      | Tuesday   | Calculating scale factors         | MD-3 |
| 11                      | Wednesday | Ratio and proportion problems     | MD-3 |
| 22/03/2021              | Thursday  | Ratio and proportion problems (2) | MD-3 |
|                         | Friday    | Mini-assessment                   |      |
|                         | Monday    | Line graphs                       |      |
| <b>12</b><br>29/03/2021 | Tuesday   | Circles                           |      |
|                         | Wednesday | Read and interpret pie charts     |      |
|                         | Thursday  | Draw pie charts                   |      |
|                         | Friday    | The mean                          |      |



## Year 6 – Summer Term



#### Lesson by lesson overview 2020/21

| Week                   | Day                               | Topic                                 |       |
|------------------------|-----------------------------------|---------------------------------------|-------|
|                        | Monday                            | Measure with a protractor             | G-1   |
| 1                      | Tuesday                           | Draw lines and angles accurately      | G-1 🔃 |
| 12/04/2021             | Wednesday                         | Introduce angles                      | G-1   |
| 12/04/2021             | Thursday                          | Angles on a straight line             | G-1 🔃 |
|                        | Friday                            | Angles around a point                 | G-1 🔃 |
|                        | Monday                            | Calculate angles                      | G-1   |
| 2                      | Tuesday                           | Vertically opposite angles            | G-1   |
|                        | Wednesday                         | Angles in a triangle                  | G-1   |
| 19/04/2021             | Thursday                          | Angles in a triangle - special cases  | G-1   |
|                        | Friday                            | Angles in a triangle - missing angles | G-1   |
|                        | Monday                            | Angles in special quadrilaterals      | G-1   |
| 3                      | Tuesday                           | Angles in regular polygons            | G-1   |
| J                      | Wednesday                         | Draw shapes accurately                | G-1   |
| 26/04/2021             | Thursday                          | Draw nets of 3-D shapes               | G-1   |
|                        | Friday                            | Mini-assessment                       |       |
| <b>4</b><br>03/05/2021 | Consolidation or SATs preparation |                                       |       |

| Week                   | Day | Topic   |
|------------------------|-----|---|
| <b>5</b><br>10/05/2021 |     |   |
| 6<br>17/05/2021        |     |   |
| 7<br>24/05/2021        | Cor | nsolidation, investigations and preparation for KS3 |
| 8 07/06/2021           |     |   |
| 9 14/06/2021           |     |   |

| Week                    | Day | Topic  |
|-------------------------|-----|--|
| <b>10</b><br>21/06/2021 |     |  |
| <b>11</b><br>28/06/2021 | Cor | solidation, investigations and preparation for KS3 |
| <b>12</b><br>05/07/2021 |     |  |
| <b>13</b><br>12/07/2021 |     |  |

