## Herons' Maths Medium Term Plan, Spring Term 2023.

We will be following White Rose units for the Spring Term of Years 5 and 6.
Mental Maths: using MyMiniMaths.co.uk, Year 5 and 6 will complete mental maths questions each day or at least 3 days out of 5 concentrating on the four operations, times table recall and other aspects of the Year 5/6 curriculum as necessary to help fluency and quick recall of facts across Mathematical disciplines. E.g: number, calculations, fractions/decimals/percentages, shape/space, measure, data handling and to support oral problem solving and reasoning. Other mental maths opportunities will be provided using White Rose 'Flashback 4' resources and weekly times table practice/tests.

Problem Solving and Reasoning Skills: PSRS questions and opportunities are available every day for children, from the extension/'choose your own challenge' baskets in the classroom.

White Rose Small Steps: each lesson will usually take the form of the L.O. in each separate small step for the unit in question (see below).
Main Maths lessons are daily, Monday-Friday in the morning, either from 11am as usual or from 9:40 to 10:40 dependant on timetable/staffing and the 'Step' or L.O. in question. Monday-Thursday lessons follow the sequence of the main unit. Friday's lessons are usually fractions-based to support ongoing recall and understanding of fractions.
L.O.s are titled 'To understand...' or 'To understand and use..." unless otherwise stated.
Year 5 $\quad$ Year 6

Spring $1^{\text {st }}$, Weeks 1, 2 and 3 (Not Fridays of Spring 1 ${ }^{\text {st }}$, Weeks 1-3 (not Fridays of weeks Weeks 2 and 3:

Unit: Y5, Multiplication and Division B.

- Step 1 To Multiply up to a 4-digit number by a 1-digit number
- Step 2 To Multiply a 2-digit number by a 2-digit number (area model)
- Step 3 To Multiply a 2-digit number by a 2-digit number
- Step 4 To Multiply a 3-digit number by a 2-digit number
- Step 5 To Multiply a 4-digit number by a 2-digit number
- Step 6 To Solve problems with multiplication
- (Step 7 Short division - to be missed/put together with Step 8)

Unit: Y6, Ratio

- Step 1 To decide whether to add or multiply
- Step 2 To use ratio language
- Step 3 Introduction to the ratio symbol (combined with Step 4)
- Step 4 To explore the relationship between ratio and fractions
- Step 5 Scale drawing
- Step 6 Use scale factors
- Step 7 To compare similar shapes
- Step 8 Ratio problems
- Step 9 Proportion problems
- Step 10 Ratio and proportion with Recipes
- $\quad$ Step 8 To Divide a 4-digit number by a 1-digit number
- Step 9 To Divide with remainders
- Step 10 Efficient division
- Step 11 To Solve problems with multiplication and division

Spring $1^{\text {st }}$, Weeks 2 and 3 (Fridays only), weeks 4 and 5 (Mon-Friday):
Unit: Y5 Fractions B.

- Step 1 Multiply a unit fraction by an integer
- Step 2 Multiply a non-unit fraction by an integer
- Step 3 Multiply a mixed number by an integer
- Step 4 Calculate a fraction of a quantity
- Step 5 Fraction of an amount
- Step 6 Find the whole
- Step 7 Use fractions as operators
Spring $1^{\text {st }}$, Week 6 (Monday-Thursday with Friday saved for consolidation/contingency):
Unit: Y5 Decimals and Percentages.
- Step 1 Decimals up to 2 decimal places
- Step 2 Equivalent fractions and decimals (tenths)
- Step 3 Equivalent fractions and decimals (hundredths)
- Step 4 To understand and use Equivalent fractions and decimals
- Rest of week 3 to involve: consolidation of ratio understanding, formal methods of four operations and to recap Measurement and long division from autumn term
Spring $1^{\text {st }}$, Weeks 2 and 3 (Fridays only): Unit: Year 6 Fractions (autumn term recap and consolidation, link to Spring Unit 3 Decimals).
- Consolidation exercises as required. SEN/LAP: to recap Fractions work from Year 5 unit
- MAP/HAP/GD: Extension through Reasoning and Problem Solving activities to support understanding/fluency and practice of answering of multi-mark SATs questions involving multi-step problems.

Spring ${ }^{\text {st }}$, Weeks 4 \& 5 (all days): Unit: Y6 Algebra.

- Step 1 1-step function machines
- Step 2 2-step function machines
- Step 3 To understand and form expressions
- Step 4 To understand and use Substitution
- Step 5 To understand and use Formulae
- Step 6 Form equations
- Step 7 Solve 1-step equations
- Step 8 Solve 2-step equations
- Step 9 Find pairs of values
- Step 10 Solve problems with two unknowns

[^0]Unit: Y5 Decimals and Percentages (cont'd).

- Step 5 Thousandths as fractions
- Step 6 Thousandths as decimals
- Step 7 Thousandths on a place value chart
- Step 8 Order and compare decimals (same number of decimal places)
- Step 9 Order and compare any decimals with up to 3 decimal places (combined with Step 8)
- Step 10 Round to the nearest whole number
- Step 11 Round to 1 decimal place
- Step 12 Understand percentages
- Step 13 Percentages as fractions
- Step 14 Percentages as decimals
- Step 15 Equivalent fractions, decimals and percentages
- Step 1 Place value within 1 (included with Step 2)
- Step 2 Place value - integers and decimals
- Step 3 Round decimals
- Step 4 Add and subtract decimals
- Step 5 Multiply by 10, 100 and 1,000
- Step 6 Divide by 10, 100 and 1,000
- Step 7 Multiply decimals by integers
- Step 8 Divide decimals by integers
- Step 9 Multiply and divide decimals in context

Spring 2 ${ }^{\text {nd }}$, Weeks 3 (Weds-Fri), 4 (all).
Unit: Y5 Area, Perimeter and Volume.

- Step 1 Investigate shapes with the same area
- Step 2 Area and perimeter
- Step 3 Area of a triangle counting squares
- Step 4 Area of a right-angled triangle
- Step 5 Area of any triangle
- Step 6 Area of a parallelogram
- Step 7 Volume - counting cubes
- Step 8 Volume of a cuboid

Spring 2, Week 2 (Thu/Fri) \& Week 3 (all):
Unit: Y6 Fractions, Decimals \& Percentages:

- Step 1 Decimal and fraction equivalents (revision, with Step 2)
- Step 2 Fractions as division
- Step 3 Understand percentages
- Step 4 Fractions to percentages
- Step 5 Equivalent fractions, decimals and percentages
- Step 6 Order fractions, decimals and percentages
- Step 7 Percentage of an amount - one step
- Step 8 Percentage of an amount - multi-step

|  | - Step 9 Percentages - missing values |
| :---: | :---: |
| Spring $2^{\text {nd }}$ Weeks 5 and 6 (to Easter break). Unit: Statistics. <br> - Step 1 Line graphs <br> - Step 2 Dual bar charts <br> - Step 3 Read and interpret pie charts <br> - Step 4 Pie charts with percentages <br> - Step 5 Draw pie charts <br> - Step 6 To find the mean <br> - Spare/extra days to be used for recap/consolidation and unit/term tests as appropriate | Spring $2^{\text {nd }}$ Weeks 4 (all) \& 5 (Mon-Tues): Unit: Area, Perimeter and Volume. <br> - Step 1 (Recap, with Step 2) Shapes - same area <br> - Step 2 To calculate Area and perimeter of rectilinear shapes <br> - Step 3 Area of a triangle counting squares <br> - Step 4 Area of a right-angled triangle <br> - Step 5 Area of any triangle <br> - Step 6 Area of a parallelogram <br> - Step 7 Volume - counting cubes <br> - Step 8 Volume of a cuboid <br> - Wednesday of week 5 for consolidation/extension \& as contingency. |
|  | Spring $2^{\text {nd }}-$ Weeks 5 (Thu-onwards) and 6 (to Easter break): <br> Unit: Y6 Statistics. <br> - Step 1 Line graphs <br> - Step 2 Dual bar charts <br> - Step 3 Read and interpret pie charts <br> - Step 4 Pie charts with percentages <br> - Step 5 Draw pie charts <br> - Step 6 The mean |


[^0]:    Spring $1^{\text {st }}$, Week 6 (all) and Spring $2^{\text {nd }}$, Week 2 (Mon-Thu):
    Unit: Year 6 Decimals.

