Oakgrove School - Curriculum Matrix

Theme: Overview

Place Value 1 Represent numbers to 10 million

- Round numbers up to 10 million to the nearest 100,000, 10,000, 1,000, 100, 10 and 1
- Solve place value problems where information is presented in different representations

Addition and Subtraction 1

- Add and subtract integers
- Add and subtract decimals of different lengths
- Solve problems involving all four operations, including multi-step word problems

Multiplication and Division 1

- Find factor pairs of numbers
- Use knowledge of factors to divide 3- and 4-digit numbers by 2-digit numbers
- Find common multiples
- Identify prime numbers to 100
- Develop mental methods for calculations, using

Fractions, Decimals and Percentages 1

- Simplify fractions
- Place fractions on a number line
- Compare and order fractions with different denominators, using a common denominator

Fractions, Decimals and Percentage

- Add and subtract fractions
- Add and subtract mixed numbers
- Add and subtract proper fractions and mixed

Fractions, Decimals and Percentages

- Multiply a fraction by an integer by repeated
- Multiply a fraction by a fraction using a visual representation
- Multiply a fraction by a fraction Divide a fraction by an integer

- Use negative numbers in context
- Calculate differences between positive and negative numbers, where a visual representation is available
- Calculate differences between positive and negative numbers, where the information is presented on a graph
- Solve place value problems

Divide up to a 4-digit number by a 2-digit number Make choices about how to deal with remainders after division

Multiplication and Division 3

- Use BODMAS to complete calculation using the correct order of operations
- Solve problems involving all four operations, including multi-step word problems

Algebra 1

- Find and express a one-step rule for a linear seauence
- Find and express a two-step rule for a linear
- Find missing numbers in sequences with a twostep rule, including the number which precedes the given start number
- Form algebraic expressions
- Use symbols and letters for substitution
- Use formulae

Fractions, Decimals and Percentages 4

- Use ratio terminology per, each, share
- Compare fractions and ratios Use a colon as a ratio symbol
- Calculate using ratio
- Use scale factors to enlarge shapes
- Use a scale factor to calculate missing side lengths
- Solve ratio and proportion problems

- Identify, read and write metric measurements for length, mass and capacity
- Convert between metric units of measurement Solve one-step word problems which involve the conversion of measures

- Calculate using metric units of measure
- Convert between miles and kilometres Solve multi-step word problems which involve the conversion of measures
- Solve time duration word problems

- Calculate perimeter and area of compound rectilinear shapes
- Calculate the area of a triangle
- Calculate the area of a parallelogram Calculate volume by counting cubes
- Calculate the volume of a cuboid using lxhxw

Fractions, Decimals and Percentag

Calculate a fraction of an amount Calculate a whole from a fractional part

Fractions, Decimals and Percentag

- Convert fractions to percentages
- Find equivalences between fractions, decimals and percentages
- Order and compare fractions, decimals and percentages Calculate a percentage of an amount including
- multiples of 1%
- Calculate a whole from a percentage part Link percentages to pie charts

- Measure with a protractor
- Explore angle facts and real word use of angles Calculate angles on a straight line and around a
- Calculate angle angles using vertically opposite angle knowledge
- Calculate missing angles in triangles
- Calculate missing angles in quadrilaterals

Explore interior angles in polygons Shape 2

Draw shapes and nets accurately

radius

- Identify 3d shapes from their nets
- Identify parts of circles- circumference, radius and diameter Know that the diameter of a circle is double the

- revision plan, based on the QLA from the papers before half term.
- The revision plan MUST be shared with PLT It is expected that this plan will include significant intervention for individual pupils and groups of pupils with known misconceptions or gaps in their understanding and teachers are encouraged to use time flexibly to deliver the

Top Trumps data project

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Bar charts and frequency diagrams

Averages - mean, median, mode and range

Frequency tables

Scatter graphs

Probability

plans that they have.

Substitute numbers into expressions

Collect like terms

Speed

Use a distance time graph

Speed

Use a distance time graph

Fraction, decimals and percentages

Calculate percentage increases and decreases

Find a whole from a percentage amount

Calculate percentage increases and decreases Find a whole from a percentage amount