|  |
| --- |
| C:\Users\vikki.harris\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\BD03C6E3.tmpC:\Users\vikki.harris\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\BD03C6E3.tmpMaths UKS2 KSP Y5 |
| Autumn Term |
| Place Value Autumn 1/ 6 lessons | Resources |
| Objectives | Ready to progress | Power Maths |
| I can read and write numbers up to 10 000 000 I can read, write numbers up to 1 000 000. I can order and compare numbers up to 10 000 000 and determine the value of each digit. I can order and compare numbers up to 1 000 000 and determine the value of each digit. I can round any whole number to a required degree of accuracy. I can round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000I can use negative numbers in context, and calculate intervals across zero. I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. I can count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000. I can solve practical place value and number problems.I can read Roman numerals to 1000 (M) and recognise years written in Roman numerals. | 6NPV–1 Understand the relationship between powers of 10 from 1 hundredth to 10 million, and use this to make a given number 10, 100, 1,000, 1 tenth, 1 hundredth or 1 thousandth times the size (multiply and divide by 10,100 and 1,000).6NPV–2 Recognise the place value of each digit in numbers up to 10 million, including decimal fractions, and compose and decompose numbers up to 10 million using standard and non-standard partitioning.6NPV–3 Reason about the location of any number up to 10 million, including decimal fractions, in the linear number system, and round numbers, as appropriate, including in contexts.• 6NPV–4 Divide powers of 10, from 1 hundredth to 10 million, into 2, 4, 5 and 10 equal parts, and read scales/number lines with labelled intervals divided into 2, 4, 5 and 10 equal parts | All red objectives are covered through the Year 6: Unit 1: Place value within 10,000,000Only the Roman Numeral ones are not- this can be found in Year 5Unit 1: Place value within 100,000Unit 2: place value within 1,000,000 |

|  |  |
| --- | --- |
| Four operations Autumn 1/ 1 week 4 lessons | Resources |
| Objectives | Ready to progress | Power Maths |
| I can solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. I can add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction).I can multiply numbers up to 4 digits by a 2-digit whole number using the formal written methods of long multiplication and interpret remainders as whole number remainders, fractions, or by rounding. I can multiply numbers up to 4 digits by a 1- or 2-digit number using a formal written method.I can divide numbers up to 4 digits by a two-digit whole number, using formal methods of long division and interpret remainders as whole numbers, fractions, or by rounding. I can divide numbers up to 4 digits by a 1-digit number using the formal written method of short division. | 6AS/MD–1 Understand that 2 numbers can be related additively or multiplicatively and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number).6AS/MD–2 Use a given additive or multiplicative calculation to derive or complete a related calculation, using arithmetic properties, inverserelationships, and place-value understanding. | Year 6:Unit 2: Four Operations (1) |

|  |  |
| --- | --- |
| Four Operations 2: Autumn 1/ 15 lessons | Resources |
| Objectives | Ready to progress | Power Maths |
| I can identify common factors, common multiples and prime numbers and composite (non-prime) numbers. I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. I can establish whether a number up to 100 is prime and recall prime numbers up to 19.I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000. I can recognise and use square numbers and cube numbers, and the notation for squared and cubed.I can use the order of operations to carry out calculations.I can multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.add and subtract numbers mentally with increasingly large numbers. I can use rounding to check answers to calculations and levels of accuracy.I can multiply numbers up to 4 digits by a 2-digit whole number using the formal written methods of long multiplication and interpret remainders as whole number remainders, fractions, or by rounding. I can multiply numbers up to 4 digits by a 1- or 2-digit number using a formal written method.I can divide numbers up to 4 digits by a two-digit number using the formal written method of short division, where appropriate, interpreting remainders according to the context.I can divide numbers up to 4 digits by a two-digit whole number, using formal methods of long division and interpret remainders as whole numbers, fractions, or by rounding. I can divide numbers up to 4 digits by a 1-digit number using the formal written method of short division. | 5MD–1 Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1hundredth times the size.5MD–2 Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors.6AS/MD–1 Understand that 2 numbers can be related additively or multiplicatively and quantify additive and multiplicative relationships (multiplicative relationships restricted to multiplication by a whole number). | Year 6:Unit 3: Four Operations (2) |

|  |  |
| --- | --- |
| Fractions Autumn 1 / 11 lessons | Resources |
| Objectives | Ready to progress | Power Maths |
| I can use common factors to simplify fractions; use common multiples to express fractions in the same denomination. I can compare and order fractions whose denominators are all multiples of the same number. I can compare and order fractions, including fraction >1 I can identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.I can recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number.I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. *I can add and subtract fractions with the same denominator and multiples of the same number.* | • 5F–2 Find equivalent fractions and understand that they have the samevalue and the same position in the linear number system. 6F–1 Recognise when fractions can be simplified, and use commonfactors to simplify fractions.• 6F–2 Express fractions in a common denomination and use this tocompare fractions that are similar in value.• 6F–3 Compare fractions with different denominators, including fractionsgreater than 1, using reasoning, and choose between reasoning andcommon denomination as a comparison strategy. | Year 6:Unit 4: Fractions (1) |

|  |  |
| --- | --- |
| Position and Direction Autumn 1 / 4 lessons | Resources |
| Objectives | Ready to progress | Power Maths |
| I can describe positions on the full coordinate grid (all four quadrants). (position/direction)I can reflect shapes in the axes. I can identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.I can draw and translate simple shapes on the coordinate plane. |  | Year 6:Unit 6: Geometry – position and direction |

|  |  |
| --- | --- |
| Fractions Autumn 2 / 9 lessons | Resources |
| Objectives | Ready to progress | Power Maths |
| I can multiply simple proper fractions and simplify the answer (e.g. ¼ x ⅟₂ = ⅟₈). I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.I can divide proper fractions by whole numbers (e.g. ⅓ ÷ 2 = ⅙).I can add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. I can add and subtract fractions with the same denominator and multiples of the same number.use written division methods in cases where the answer has up to two decimal places. | • 5F–2 Find equivalent fractions and understand that they have the samevalue and the same position in the linear number system. 6F–1 Recognise when fractions can be simplified, and use commonfactors to simplify fractions.• 6F–2 Express fractions in a common denomination and use this tocompare fractions that are similar in value.• 6F–3 Compare fractions with different denominators, including fractionsgreater than 1, using reasoning, and choose between reasoning andcommon denomination as a comparison strategy. | Year 6:Unit 5: Fractions (2) |

|  |  |
| --- | --- |
| Decimals Autumn 2 / 9 lessons | Resources |
| Objectives | Ready to progress | Power Maths |
| I can identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places. I can recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.I can associate a fraction with division and calculate decimal fraction equivalents for example 0.375 for a simple fraction 3/8.  *I can read and write decimal numbers as fractions (e.g. 0.72 = ⁷²∕₁₀₀)*use written division methods in cases where the answer has up to two decimal places.multiply one-digit numbers with up to two decimal places by whole numbers.  | na | Y6 Unit 7 Decimals |

|  |  |
| --- | --- |
| Percentages Autumn 2 / 9 lessons | Resources |
| Objectives | Ready to progress | Power Maths |
| recall and use equivalences between simple fractions, decimals and percentages, including in different contexts. *I can solve problems which require knowing percentage and decimal equivalents of ⅟₂, ⅟₄, ⅟₅, ⅖, ⅘ and those with a denominator of a multiple of 10 or 25*solve problems involving the calculation of percentages (e.g. of measures) such as 15% of 360 and the use of percentages for comparisonmultiply simple proper fractions and simplify the answer (e.g. ¼ x ⅟₂ = ⅟₈). I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.I can use common factors to simplify fractions; use common multiples to express fractions in the same denomination. I can compare and order fractions whose denominators are all multiples of the same number.  |  | Year 6 Unit 8: Percentages |