Mathematics Y5

Place Value	1. Read, write, order & compare numbers to at least 1 000 000 and determine the value of each digit.
	2. Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000. Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
	3. Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.
	4. Read Roman numerals to 1000 (M) and recognise years written in Roman numerals.
Add and Sub	5. Add and subtract whole numbers with more than 4 digits, including using formal written methods (column addition and subtraction).
	6. Add and subtract numbers mentally with increasingly large numbers. Use rounding to check answers to calculations and levels of accuracy.
	7. Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
Mult and Div	8. Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.
	9. Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. Establish whether a number up to 100 is prime and recall prime numbers up to 19.
	10. Multiply numbers up to 4 digits by a 1- or 2-digit number using a formal written method. Divide numbers up to 4 digits by a 1-digit number using the formal written method of short division.
	11. Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.
	12. Recognise and use square numbers and cube numbers, and the notation for squared and cubed.
Fractions	13. Compare and order fractions whose denominators are all multiples of the same number. Add and subtract fractions with the same denominator and multiples of the same number.
	14. Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.
	15. Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number.
	16. Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.
	17. Round decimals with two decimal places to the nearest whole number and to one decimal place. Read and write decimal numbers as fractions (e.g. 0.72 = $^{72}/_{100}$).
	18. Read, write, order and compare numbers with up to three decimal places. Solve problems involving number up to three decimal places.
	19. Write percentages as a fraction. 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.
Measure	20. Convert between different units of metric measure (e.g. km & m; cm & m; cm & mm; g & kg; l & ml). Use approx. equivalences between metric and imperial units (e.g. inches, pounds & pints).
	21. Measure & calculate the perimeter of composite rectilinear shapes in cm/m. Calculate the area of squares/rectangles using standard units, square cm/m and estimate the area of irregular shapes.
	22. Estimate volume (e.g. using 1 cm blocks to build cubes/cuboids) and capacity (e.g. using water).
	23. Solve probs involving converting between units of time. Use all four operations to solve probs involving measure (e.g. length, mass, volume, money) using decimal notation including scaling.
Geometry	24. Identify 3D shapes, including cubes and other cuboids, from 2D representations.
	25. Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. Draw given angles, and measure them in degrees.
	26. Identify: angles at a point and one whole turn (total 360^0); angles at a point on a straight line and ½ a turn (total 180^0); other multiples of 90^0.
	27. Use the properties of rectangles to deduce related facts and find missing lengths and angles.
	28. 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.
Stats	29. Solve comparison, sum and difference problems using information presented in a line graph.
	30. Complete, read and interpret information in tables, including timetables.

English

Themes	Spelling	Grammar	Composition
Information reports Poetry Explanations Comparative writing Narrative writing Persuasive writing	Pluralisation Prefixes and Suffixes Irregular tense changes	Adverbial phrases and fronted adverbials. Further work on joining clauses with conjunctions and commas Punctuation – dashes, hyphens, colons , semicolons Dialogue punctuation Further development of word classes – adverbs, adjectives, nouns, verbs, pronouns, modal verbs Prepositions	In narratives, creating settings, characters and plot In non-narrative material, using simple organisational devices [for example, headings and sub-headings] Creating and linking paragraphs Powerful verbs Developing vocabulary

literacy

Poems biography letters Persuasive writing

Explanations narrative writing info reports

science

Exploring magnetic force Exploring light and sound

geography

Maps comparing Polar landscapes with Meldreth

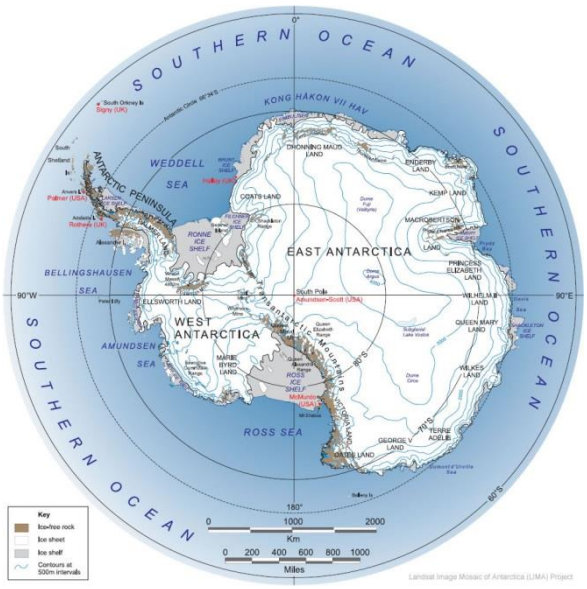
lives and lifestyles of Inuit people Polar Explorers

Art / D&T

Polar landscapes.

Developing new techniques.

Studying famous artists: Keith Shackleton and Peter Scott.



Computing

Programming

Code club with Mr lees using BBC Microbots

Music

Creating musical soundscapes using percussion instruments

PSHCE

Healthy and safe lifestyles Conflict Resolution

PE

Gymnastics pair composition

Dance - ice Games - Netball

Spanish

greetings simple words and phrases

Spring Term 2016 – Polar Explorers

Chaffinch Class