

Thornhill Primary School Annual Pupil Report

Subject	Year 6 National Curriculum Statements	Not yet achieved
Maths	Number: Place Value	
	Read, write, order and compare numbers up to 10 000 000	
	Round any whole number to a required degree of accuracy	
	Use negative numbers in context, and calculate intervals across zero.	
	Solve number and practical problems that involve all of the above.	
	Addition, Subtraction, Multiplication and Division	
	Multiply and divide multi-digit numbers up to 4 digits by a two-digit whole number (e.g. 3452 x 32=)	
	Perform mental calculations, including with mixed operations and large numbers. (e.g. 60 x 70=)	
	Identify common factors, common multiples and prime numbers.	
	Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.	
	Use estimation to check answers to calculations.	
	Fractions	
	Use common factors to simplify fractions (e.g. 2/8 = 1/4)	
	Compare and order fractions (e.g. 1/2, 1/3, 2/5)	
	Add and subtract fractions (e.g. $2/8 + 1/4 = 2/4$)	
	Multiply simple pairs of proper fractions, [for example, $1/4 \times 1/2 = 1/8$].	
	Divide proper fractions by whole numbers [for example, $1/3 \div 2 = 1/6$]	
	Multiply one-digit numbers with up to two decimal places by whole numbers. (e.g. 8 x 0.6= 4.8)	
	Associate a fraction with division and calculate decimal fraction equivalents.	
	Multiply one-digit numbers with up to 2 decimal places by whole numbers.	
	Solve problems which require answers to be rounded to specified degrees of accuracy.	
	Recall and use equivalences between simple fractions, decimals and percentages, including in problems. $(1/5 = 20\%)$	
	Measurement	
	Solve problems involving measurement (cm, m, ml, l, km, mm)	
	Use, read, write and convert between standard units (cm, m, ml, l, km, mm)	
	Convert between miles and kilometres.	
	Calculate the area of parallelograms and triangles.	
	Calculate, estimate and compare volume of cubes and cuboids	
	Geometry: Properties of Shapes	
	Draw 2-D shapes using given dimensions and angles.	
	Recognise, describe and build simple 3-D shapes, including making nets.	
	Find unknown angles in any triangles, quadrilaterals, and regular polygons.	
	Name parts of circles, including radius, diameter and circumference.	
	Recognise angles at a point, are on a straight line, or are vertically opposite.	
	Geometry: Position and Direction	
	Describe positions on the full coordinate grid (all four quadrants).	
	Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.	
	Statistics	
	Interpret and construct pie charts and line graphs.	
	Calculate and interpret the mean as an average.	
	Ratio and Proportion	
	Solve problems using ratio. (e.g. 3:5).	
	Solve problems involving the calculation of percentages. (e.g. 15% of 360)	
	Solve problems involving similar shapes where the scale factor is known or can be found.	

	Algebra	
	Use simple formulae. (e.g. 4a +10= 30)	
	Generate and describe linear number sequences. (3, 7, 9, 11)	
	Express missing number problems algebraically. (e.g. 4 + c = 39)	
	Find pairs of numbers that satisfy an equation with 2 unknowns.	
English		
•	Word Reading	
	To read aloud and to understand the meaning of new words. (applying understanding of	
	root words, prefixes and suffixes)	
	Comprehension	
	To read and discuss an increasingly wide range of fiction, poetry, plays, non-fiction and	
	reference books or textbooks.	
	To discuss key themes across different books and genres.	
	Recommending books that they have read to their peers, giving reasons for their	
	choices.	
	Identifying and discussing themes and conventions across a range of writing.	
	Making comparisons within and across books.	
	Learning a wider range of poetry by heart.	
	Preparing poems and plays to read aloud and to perform, showing understanding	
	through intonation, tone and volume so that the meaning is clear to an audience	
	Checking that the book makes sense to them, discussing their understanding and	
	exploring the meaning of words in context.	
	Asking questions to improve their understanding.	
	Drawing inferences such as inferring characters' feelings, thoughts and motives from	
	their actions, and justifying inferences with evidence.	
	Predicting what might happen from details stated and implied.	
	Summarising the main ideas drawn from more than one paragraph, identifying key details that support the main ideas.	
	Distinguish between statements of fact and opinion.	
	Identifying how language, structure and presentation contribute to meaning.	
	Discuss and evaluate how authors use language, including figurative language,	
	considering the impact on the reader.	
	Retrieve, record and present information from non-fiction.	
	Explain and discuss their understanding of what they have read.	
	Provide reasoned justifications for their views.	
	Participate in discussions about books that are read to them and those they can read for	
	themselves, building on their own and others' ideas and challenging views courteously.	
	Writing	
	Use prefixes and suffixes and understand the guidance for adding them.	
	Spell some words with 'silent' letters.	
	Continue to distinguish between homophones and other words which are often	
	confused.	
	Use dictionaries to check the spelling and meaning of words.	
	Use a thesaurus.	
	To understand the spelling within the National Curriculum.	
	Handwriting	
	Write legibly, fluently and with increasing speed	
	Choosing which shape of a letter to use when given choices and deciding whether or not	
	to join specific letters.	
	Composition	
	Identifying the audience for and purpose of the writing, selecting the appropriate form	
	and using other similar writing as models for their own.	
	Noting and developing initial ideas, drawing on reading and research where necessary	

Thornhill Primary School Annual Pupil Report

	/ umadii apii tepere	
	In writing narratives, considering how authors have developed characters and settings in	
	what pupils have read, listened to or seen performed.	
	Selecting appropriate grammar and vocabulary, understanding how such choices can	
	change and enhance meaning	
	In narratives, describing settings, characters and atmosphere and integrating dialogue to	
	convey character and advance the action.	
	Précising longer passages.	
	Using further organisational and presentational devices to structure text and to guide	
	the reader [for example, headings, bullet points, underlining].	
	Assessing the effectiveness of their own and others' writing.	
	Proposing changes to vocabulary, grammar and punctuation to enhance effects and	
	clarify meaning.	
	Ensuring correct subject and verb agreement when using singular and plural,	
	distinguishing between the language of speech and writing and choosing the appropriate	
	register.	
	Ensuring the consistent and correct use of tense throughout a piece of writing	
	Proof-read for spelling and punctuation errors.	
	Perform their own compositions, using appropriate intonation, volume, and movement	
	so that meaning is clear.	
	Vocabulary, Punctuation and Grammar	
	To develop understanding of parts of speech— e.g. nouns, verbs, adverbs, modal verbs,	
	adjectives, prepositions, conjunctions, etc.	
	To use and understand the different types of sentence structures and types of clauses.	
	To be able to use key punctuation—e.g. inverted commas, full stops, commas, colons,	
	brackets, semi-colons, etc.	
	Recognising vocabulary and structures that are appropriate for formal speech and	
	writing, including subjunctive forms.	
	Using passive verbs to affect the presentation of information in a sentence.	
	Use the perfect form of verbs to mark relationships of time and cause.	
	Using modal verbs or adverbs to indicate degrees of possibility.	
	Using relative clauses beginning with who, which, where, when, whose, that or with an	
	implied (i.e. omitted) relative pronoun.	
	Learn grammar and spelling rules for Year 6- see National Curriculum Appendix.	
Science	Living things and their habitats	
	Describe how living things are classified into broad groups according to common	
	observable characteristics and based on similarities and differences, including micro- organisms, plants and animals.	
	Give reasons for classifying plants and animals based on specific characteristics.	
	Animals including humans	
	Identify and name the main parts of the human circulatory system, and describe the	
	functions of the heart, blood vessels and blood.	
	Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies	
	function.	
	Describe the ways in which nutrients and water are transported within animals,	
	including humans.	
	Evolution and inheritance	
	Recognise that living things have changed over time and that fossils provide information	
	about living things that inhabited the Earth millions of years ago.	
	Recognise that living things produce offspring of the same kind, but normally offspring	
	vary and are not identical to their parents.	
	Identify how animals and plants are adapted to suit their environment in different ways	
	and that adaptation may lead to evolution.	
	Light	

	Recognise that light appears to travel in straight lines.	
	Use the idea that light travels in straight lines to explain that objects are seen because	
	they give out or reflect light into the eye.	
	Explain that we see things because light travels from light sources to our eyes or from	
	light sources to objects and then to our eyes.	
-	· · ·	
	Use the idea that light travels in straight lines to explain why shadows have the same	
-	shape as the objects that cast them.	
	Electricity	
	Associate the brightness of a lamp or the volume of a buzzer with the number and	
	voltage of cells used in the circuit.	
	Compare and give reasons for variations in how components function, including the	
_	brightness of bulbs, the loudness of buzzers and the on/off position of switches.	
	Use recognised symbols when representing a simple circuit in a diagram.	
Art and	To create sketch books to record their observations and use them to review and revisit	
Design	ideas.	
2 001911	To improve their mastery of art and design techniques, including drawing, painting and	
	sculpture with a range of materials [for example, pencil, charcoal, paint, clay]	
	Learn about great artists, architects and designers in history.	
Computing	Design, write and debug programs that accomplish specific goals, including controlling or	
	simulating physical systems; solve problems by decomposing them into smaller parts.	
-	Use sequence, selection, and repetition in programs; work with variables and various	
	forms of input and output.	
	Use logical reasoning to explain how some simple algorithms work and to detect and	
	correct errors in algorithms and programs.	
-	Understand computer networks including the internet; how they can provide multiple	
	services, such as the world wide web; and the opportunities they offer for	
	communication and collaboration.	
	Use search technologies effectively, appreciate how results are selected and ranked, and	
	be discerning in evaluating digital content.	
-		
	Select, use and combine a variety of software (including internet services) on a range of	
	digital devices to design and create a range of programs, systems and content that	
	accomplish given goals, including collecting, analysing, evaluating and presenting data	
-	and information.	
	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable	
	behaviour; identify a range of ways to report concerns about content and contact.	
Design	Design	
and	Use research and develop design criteria to inform the design of innovative, functional,	
	appealing products that are fit for purpose, aimed at particular individuals or groups.	
Technology	Generate, develop, model and communicate their ideas through discussion, annotated	
	sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and	
	computer-aided design.	
	Make	
	Select from and use a wider range of tools and equipment to perform practical tasks [for	
	example, cutting, shaping, joining and finishing], accurately.	
	Select from and use a wider range of materials and components, including construction	
	materials, textiles and ingredients, according to their functional properties and aesthetic	
	qualities.	
	·	
	Evaluate	
	=======================================	
i	Investigate and analyse a range of existing products	I
ļ	Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the	
	Investigate and analyse a range of existing products. Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.	

Thornhill Primary School Annual Pupil Report

Understand how key events and individuals in design and technology have helped shape the world. Technical Knowledge Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. Apply their understanding of computing to program, monitor and control their products. Ceography Locational Knowledge Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features
Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. Apply their understanding of computing to program, monitor and control their products. Ceography Locational Knowledge Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Name and locate counties and cities of the United Kingdom, geographical regions and
Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. Apply their understanding of computing to program, monitor and control their products. Ceography Locational Knowledge Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Name and locate counties and cities of the United Kingdom, geographical regions and
Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. Apply their understanding of computing to program, monitor and control their products. Locational Knowledge Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Name and locate counties and cities of the United Kingdom, geographical regions and
Cams, levers and linkages]. Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. Apply their understanding of computing to program, monitor and control their products. Locational Knowledge Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Name and locate counties and cities of the United Kingdom, geographical regions and
Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]. Apply their understanding of computing to program, monitor and control their products. Locational Knowledge Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Name and locate counties and cities of the United Kingdom, geographical regions and
incorporating switches, bulbs, buzzers and motors]. Apply their understanding of computing to program, monitor and control their products. Locational Knowledge Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Name and locate counties and cities of the United Kingdom, geographical regions and
Apply their understanding of computing to program, monitor and control their products. Locational Knowledge Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Name and locate counties and cities of the United Kingdom, geographical regions and
Locational Knowledge Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Name and locate counties and cities of the United Kingdom, geographical regions and
Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Name and locate counties and cities of the United Kingdom, geographical regions and
Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Name and locate counties and cities of the United Kingdom, geographical regions and
physical and human characteristics, countries, and major cities. Name and locate counties and cities of the United Kingdom, geographical regions and
Name and locate counties and cities of the United Kingdom, geographical regions and
their identifying human and physical characteristics, key topographical features
1
(including hills, mountains, coasts and rivers), and land-use patterns; and understand
how some of these aspects have changed over time.
Identify the position and significance of latitude, longitude, Equator, Northern
Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and
Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and
night).
Place Knowledge
Understand geographical similarities and differences through the study of human and
physical geography of a region of the United Kingdom, a region in a European country,
and a region within North or South America.
Human and physical geography
Physical geography, including: climate zones, biomes and vegetation belts, rivers,
mountains, volcanoes and earthquakes, and the water cycle.
Human geography, including: types of settlement and land use, economic activity
including trade links, and the distribution of natural resources including energy, food, minerals and water.
Geographical skills and fieldwork
Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.
Use the eight points of a compass, four and six-figure grid references, symbols and key
(including the use of Ordnance Survey maps) to build their knowledge of the United
Kingdom and the wider world.
Use fieldwork to observe, measure, record and present the human and physical features
in the local area using a range of methods, including sketch maps, plans and graphs, and
digital technologies.
History Pupils should continue to develop a chronologically secure knowledge and
understanding of British, local and world history, establishing clear narratives within and
across the periods they study.
They should note connections, contrasts and trends over time and develop the
appropriate use of historical terms.
They should regularly address and sometimes devise historically valid questions about
change, cause, similarity and difference, and significance.
They should construct informed responses that involve thoughtful selection and
organisation of relevant historical information. They should understand how our
organisation of relevant historical information. They should understand now out
knowledge of the past is constructed from a range of sources.

Languages	Listen attentively to spoken language and show understanding by joining in and	
	responding.	
	Explore the patterns and sounds of language through songs and rhymes and link the	
	spelling, sound and meaning of words.	
	Engage in conversations; ask and answer questions; express opinions and respond to	
	those of others; seek clarification and help.	
	Speak in sentences, using familiar vocabulary, phrases and basic language structures.	
	Develop accurate pronunciation and intonation so that others understand when they are	
	reading aloud or using familiar words and phrases.	
	Present ideas and information orally to a range of audiences.	
	Read carefully and show understanding of words, phrases and simple writing.	
	Appreciate stories, songs, poems and rhymes in the language.	
	Broaden their vocabulary and develop their ability to understand new words that are	
	introduced into familiar written material, including through using a dictionary.	
	Write phrases from memory, and adapt these to create new sentences, to express ideas	
	clearly.	
	Describe people, places, things and actions orally* and in writing.	
Music	Play and perform in solo and ensemble contexts, using their voices and playing	
Musio	musical instruments with increasing accuracy, fluency, control and expression.	
	Improvise and compose music for a range of purposes using the inter-related	
	dimensions of music.	
	Listen with attention to detail and recall sounds with increasing aural memory.	
	Use and understand staff and other musical notations.	
	Appreciate and understand a wide range of high-quality live and recorded music	
	drawn from different traditions and from great composers and musicians.	
	Develop an understanding of the history of music.	
P.E.	Use running, jumping, throwing and catching in isolation and in combination.	
	Play competitive games, modified where appropriate [for example, badminton,	
	basketball, cricket, football, hockey, netball, rounders and tennis], and apply basic	
	principles suitable for attacking and defending.	
	Develop flexibility, strength, technique, control and balance [for example, through	
	athletics and gymnastics].	
	Perform dances using a range of movement patterns.	
	Take part in outdoor and adventurous activity challenges both individually and within a	
	team.	
	Compare their performances with previous ones and demonstrate improvement to	
	achieve their personal best.	