



Pondhu

Primary School

National Curriculum Coverage



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Curriculum Themes

At Pondhu, we have themes that thread through learning opportunities wherever possible. These will be enquiry based and encourage child to ask their own questions to direct learning. However, where no links can be made, pupils will be taught alternative short units of work.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Weather and Seasons	Toys	UK	Dinosaurs	Local Area	Seaside
Year 2	Continents and Oceans	Emergencies – The Great Fire/Gunpowder Plot	Hot and cold places	Space	Zambia	Titanic
Year 3	Climate Zones	Stone Age to Iron Age	North America	Cornwall (Local History)	South America and Rio	Ancient Egyptians
Year 4	Rivers	Ancient Greece	Rainforests	Every Picture Tells a Story (Inspirational Artists)	The Amazon	Romans
Year 5	Mountains	Anglo Saxons	Volcanoes and Earthquakes	Vikings	European Region	Benin
Year 6	Victorians	UK	Still Life	Mechanical Systems	Local Area and Region	World War II



Art and Design

Aims

The national curriculum for art and design aims to ensure that all pupils:

- produce creative work, exploring their ideas and recording their experiences
- become proficient in drawing, painting, sculpture and other art, craft and design techniques
- evaluate and analyse creative works using the language of art, craft and design
- know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms.

National Curriculum Objectives	Year 1			Year 2		
	Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
Use a range of materials creatively to design and make products	✓	✓	✓	✓	✓	✓
Use drawing, painting and sculpture to develop and share their ideas, experiences and imagination	✓	✓	✓✓	✓	✓	✓✓
Develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space	✓	✓	✓✓	✓	✓	✓✓
Be taught about the work of a range of artists, craft makers and designers, describing the differences and similarities between different practices and disciplines, and making links to their own work.	✓	✓	✓✓	✓	✓	✓✓



National Curriculum Objectives	Year 3			Year 4			Year 5			Year 6		
	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum
Develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design	✓	✓	✓✓	✓	✓	✓			✓		✓	✓
Create sketch books to record their observations and use them to review and revisit ideas	✓	✓	✓	✓	✓	✓	✓		✓		✓	
Improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]	✓	✓	✓✓	✓	✓	✓	✓✓	✓	✓	✓	✓	✓
Know about great artists, architects and designers in history	✓	✓			✓✓	✓	✓		✓			✓



Computing

Aims

The national curriculum for computing aims to ensure that all pupils:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology

National Curriculum Objectives	Year 1			Year 2		
	Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions	✓	✓✓	✓	✓		
Create and debug simple programs		✓	✓	✓		
Use logical reasoning to predict the behaviour of simple programs		✓	✓	✓		
Use technology purposefully to create, organise, store, manipulate and retrieve digital content	✓	✓	✓✓	✓	✓✓✓	✓✓
Recognise common uses of information technology beyond school			✓		✓	
Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies	✓				✓	



National Curriculum Objectives	Year 3			Year 4			Year 5			Year 6		
	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum
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 variable 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 and Technology

Aims

The national curriculum for design and technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook.

National Curriculum Objectives		Year 1			Year 2		
		Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
Design	Design purposeful, functional, appealing products for themselves and other users based on design criteria	✓✓	✓	✓	✓✓	✓	✓
	Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology	✓✓	✓	✓	✓✓	✓	✓
Make	Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]	✓✓	✓	✓✓	✓✓	✓	✓



	select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	✓✓	✓	✓✓	✓✓	✓✓	✓
Evaluate	Explore and evaluate a range of existing products	✓	✓	✓✓	✓	✓✓	✓
	Evaluate their ideas and products against design criteria	✓✓	✓	✓	✓✓	✓	✓
Technical Knowledge	Build structures, exploring how they can be made stronger, stiffer and more stable			✓	✓		✓
	Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products	✓	✓	✓		✓	✓
Cooking and Nutrition	Use the basic principles of a healthy and varied diet to prepare dishes			✓		✓	
	Understand where food comes from			✓		✓	



		Year 3			Year 4			Year 5			Year 6		
National Curriculum Objectives		Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum
Design	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	✓	✓✓	✓✓	✓✓	✓	✓✓	✓	✓✓	✓✓	✓	✓✓	✓✓
	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	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	✓	✓	✓✓	✓✓	✓	✓✓	✓	✓	✓✓	✓	✓	✓✓
	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			✓						✓			✓
Cooking and Nutrition	Understand and apply the principles of a healthy and varied diet		✓				✓		✓			✓	
	Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques		✓				✓		✓			✓	
	Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed		✓				✓		✓			✓	



Geography

All classes will have a world map on display. This will highlight any areas in the world that have been discussed through lessons or where pupils have heard news from and discussed.

Aims

The national curriculum for geography aims to ensure that all pupils:

- develop contextual knowledge of the location of globally significant places – both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes
- understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time
- are competent in the geographical skills needed to:
 - collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes
 - interpret a range of sources of geographical information, including maps, diagrams, globes, aerial photographs and Geographical Information Systems (GIS)
 - communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing at length.

National Curriculum Objectives		Year 1			Year 2		
		Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
Locational Knowledge	Name and locate the world's seven continents and five oceans				✓		
	Name, locate and identify characteristics of the four countries and capital cities of		✓				



	the United Kingdom and its surrounding seas						
Place Knowledge	Understand geographical similarities and differences through studying the human and physical geography of a small area of the United Kingdom, and of a small area in a contrasting non-European country						✓
Human and Physical Geography	Identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles	✓				✓	
	Use basic geographical vocabulary to refer to: key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather		✓	✓	✓		✓
	Use basic geographical vocabulary to refer to: key human features, including: city, town, village, factory, farm, house, office, port, harbour and shops		✓	✓	✓		✓



Geographical Skills and Fieldwork	Use world maps, atlases and globes to identify the United Kingdom and its countries, as well as the countries, continents and oceans studied at this key stage		✓		✓	✓	✓
	Use simple compass directions (North, South, East and West) and locational and directional language [for example, near and far; left and right], to describe the location of features and routes on a map			✓	✓		
	Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features; devise a simple map; and use and construct basic symbols in a key			✓			
	Use simple fieldwork and observational skills to study the geography of their school and its grounds and the key human and physical features of its surrounding environment			✓			



National Curriculum Objectives		Year 3			Year 4			Year 5			Year 6		
		Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum
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 (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 in North or South America			✓			✓			✓			✓
Human and Physical Geography	Describe and understand key aspects of: physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle	✓	✓		✓	✓		✓	✓	✓			✓
	Describe and understand key aspects of: 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		✓		✓	✓		✓		✓	✓		✓



History

All classes will have a time line on display. This will highlight any time periods that have been discussed through lessons and will reference previous historical events learned about.

Aims

The national curriculum for history aims to ensure that all pupils:

- know and understand the history of these islands as a coherent, chronological narrative, from the earliest times to the present day: how people’s lives have shaped this nation and how Britain has influenced and been influenced by the wider world
- know and understand significant aspects of the history of the wider world: the nature of ancient civilisations; the expansion and dissolution of empires; characteristic features of past non-European societies; achievements and follies of mankind
- gain and deploy a historically grounded understanding of abstract terms such as ‘empire’, ‘civilisation’, ‘parliament’ and ‘peasantry’
- understand historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends, frame historically-valid questions and create their own structured accounts, including written narratives and analyses
- understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed
- gain historical perspective by placing their growing knowledge into different contexts, understanding the connections between local, regional, national and international history; between cultural, economic, military, political, religious and social history; and between short- and long-term timescales.

National Curriculum Objectives	Year 1			Year 2		
	Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
Changes within living memory. Where appropriate, these should be used to reveal aspects of change in national life	✓		✓			
Events beyond living memory that are significant nationally or globally [for				✓		✓



example, the Great Fire of London, the first aeroplane flight or events commemorated through festivals or anniversaries]						
The lives of significant individuals in the past who have contributed to national and international achievements. Some should be used to compare aspects of life in different periods [for example, Elizabeth I and Queen Victoria, Christopher Columbus and Neil Armstrong, William Caxton and Tim Berners-Lee, Pieter Bruegel the Elder and LS Lowry, Rosa Parks and Emily Davison, Mary Seacole and/or Florence Nightingale and Edith Cavell]		✓			✓	
Significant historical events, people and places in their own locality.			✓			



National Curriculum Objectives	Year 3			Year 4			Year 5			Year 6		
	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum
Changes within living memory. Where appropriate, these should be used to reveal aspects of change in national life		✓										✓
Events beyond living memory that are significant nationally or globally	✓		✓	✓		✓	✓	✓	✓	✓		
The lives of significant individuals in the past who have contributed to national and international achievements			✓			✓	✓			✓		✓
Significant historical events, people and places in their own locality		✓										
Changes in Britain from the Stone Age to the Iron Age	✓											
A local history study		✓										
The achievements of the earliest civilizations – an overview of where and when the first civilizations appeared and a depth study of one of the following: Ancient Sumer; The Indus Valley; Ancient Egypt; The Shang Dynasty of Ancient China	✓		✓									
Ancient Greece – a study of Greek life and achievements and their influence on the western world				✓								
The Roman Empire and its impact on Britain						✓						



Britain's settlement by Anglo-Saxons and Scots							✓					
The Viking and Anglo-Saxon struggle for the Kingdom of England to the time of Edward the Confessor							✓	✓				
A non-European society that provides contrasts with British history – one study chosen from: early Islamic civilization, including a study of Baghdad c. AD 900; Mayan civilization c. AD 900; Benin (West Africa) c. AD 900-1300									✓			
A study of an aspect or theme in British history that extends pupils' chronological knowledge beyond 1066	✓					✓	✓	✓				



Languages

Aims

The national curriculum for languages aims to ensure that all pupils:

- understand and respond to spoken and written language from a variety of authentic sources
- speak with increasing confidence, fluency and spontaneity, finding ways of communicating what they want to say, including through discussion and asking questions, and continually improving the accuracy of their pronunciation and intonation
- can write at varying length, for different purposes and audiences, using the variety of grammatical structures that they have learnt
- discover and develop an appreciation of a range of writing in the language studied.

National Curriculum Objectives	Year 1 learning opportunities	Year 2 learning opportunities
Languages is not a statutory curriculum area for KS1, therefore there are no objectives.	At Pondhu we recognise the benefits of early language learning opportunities. Children in Year 1 and 2 will have short, regular opportunities to learn some basic French language skills, using lots of songs and rhymes.	



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	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Understand basic grammar appropriate to the language being studied, including (where relevant): feminine, masculine and neuter forms and the conjugation of high-frequency verbs; key features and patterns of the language; how to apply these, for instance, to build sentences; and how these differ from or are similar to English.							✓	✓	✓	✓	✓	✓



Music

Aims

The national curriculum for music aims to ensure that all pupils:

- perform, listen to, review and evaluate music across a range of historical periods, genres, styles and traditions, including the works of the great composers and musicians
- learn to sing and to use their voices, to create and compose music on their own and with others, have the opportunity to learn a musical instrument, use technology appropriately and have the opportunity to progress to the next level of musical excellence
- understand and explore how music is created, produced and communicated, including through the inter-related dimensions: pitch, duration, dynamics, tempo, timbre, texture, structure and appropriate musical notations.

National Curriculum Objectives	Year 1			Year 2		
	Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
use their voices expressively and creatively by singing songs and speaking chants and rhymes	✓	✓	✓	✓	✓	✓
play tuned and untuned instruments musically	✓	✓	✓	✓	✓	✓
listen with concentration and understanding to a range of high-quality live and recorded music	✓	✓	✓	✓	✓	✓
experiment with, create, select and combine sounds using the inter-related dimensions of music	✓	✓	✓	✓	✓	✓



National Curriculum Objectives	Year 3			Year 4			Year 5			Year 6		
	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum
play and perform in solo and ensemble contexts, using their voices and playing 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.			✓			✓			✓			✓



PE

As well as PE lessons, all classes will develop healthier lifestyles by participating in 'mile a day' and 'five a day fitness' sessions.

Aims

The national curriculum for physical education aims to ensure that all pupils:

- develop competence to excel in a broad range of physical activities
- are physically active for sustained periods of time
- engage in competitive sports and activities
- lead healthy, active lives.

National Curriculum Objectives	Year 1			Year 2		
	Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
Master basic movements including running, jumping, throwing and catching, as well as developing balance, agility and co-ordination, and begin to apply these in a range of activities	✓✓✓	✓✓✓	✓✓✓✓	✓✓✓	✓✓✓✓	✓✓✓
Participate in team games, developing simple tactics for attacking and defending		✓		✓	✓	✓
Perform dances using simple movement patterns.	✓	✓		✓	✓	✓



National Curriculum Objectives	Year 3			Year 4			Year 5			Year 6		
	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum	Aut	Spr	Sum
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 pattern	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
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.	✓	✓✓	✓	✓	✓	✓				✓	✓	✓
Swim competently, confidently and proficiently over a distance of at least 25 metres			✓			✓			✓			✓
Use a range of strokes effectively [for example, front crawl, backstroke and breaststroke]			✓			✓			✓			✓
Perform safe self-rescue in different water-based situations.			✓			✓			✓			✓



Science

Aims

The national curriculum for science aims to ensure that all pupils:

- develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
- develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
- engage in competitive sports and activities
- are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

National Curriculum Objectives Working Scientifically	Year 1			Year 2		
	Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
Ask simple questions and recognise that they can be answered in different ways	✓	✓	✓	✓	✓	✓
Observe closely, using simple equipment	✓	✓	✓	✓	✓	✓
Perform simple tests	✓	✓	✓	✓	✓	✓
Identify and classify	✓	✓	✓	✓	✓	✓
Use their observations and ideas to suggest answers to questions				✓	✓	✓
Gather and record data to help in answering questions				✓	✓	✓



National Curriculum Objectives	Year 1		
	Autumn Term	Spring Term	Summer Term
<u>Plants</u> Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees		✓	
Identify and describe the basic structure of a variety of common flowering plants, including trees		✓	
<u>Animals, including humans</u> Identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals			✓
Identify and name a variety of common animals that are carnivores, herbivores and omnivores			✓
Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)			✓
Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense			✓
<u>Everyday materials</u> Distinguish between an object and the material from which it is made	✓		
Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock	✓		
Describe the simple physical properties of a variety of everyday materials		✓	
Compare and group together a variety of everyday materials on the basis of their simple physical properties		✓	
<u>Seasonal changes</u> Observe changes across the four seasons	✓		
Observe and describe weather associated with the seasons and how day length varies	✓		



National Curriculum Objectives	Year 2		
	Autumn Term	Spring Term	Summer Term
<u>Living things and their habitats</u> Explore and compare the differences between things that are living, dead, and things that have never been alive			✓
Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other			✓
Identify and name a variety of plants and animals in their habitats, including micro-habitats			✓
Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food.			✓
<u>Plants</u> Observe and describe how seeds and bulbs grow into mature plants		✓	
Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy		✓	
<u>Animals, including humans</u> Notice that animals, including humans, have offspring which grow into adults		✓	
Find out about and describe the basic needs of animals, including humans, for survival (water, food and air)		✓	
Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene		✓	
<u>Uses of everyday materials</u> Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses	✓		
Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	✓		



National Curriculum Objectives Working Scientifically	Year 3			Year 4		
	Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
Ask relevant questions and answer them using scientific language.	✓	✓	✓			
Ask relevant questions and use different types of scientific enquiries to answer them				✓	✓	✓
Set up simple practical enquiries, comparative and fair tests	✓	✓	✓	✓	✓	✓
Take measurements using a range of scientific equipment.	✓	✓	✓			
Make systematic and careful observations and, where appropriate, take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers				✓	✓	✓
Gather, record, classify and present data in a variety of ways to help in answering questions	✓	✓	✓	✓	✓	✓
Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables	✓	✓	✓	✓	✓	✓
Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions	✓	✓	✓	✓	✓	✓
Use results to draw simple conclusions.	✓	✓	✓			
Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions				✓	✓	✓
Identify differences, similarities or changes related to simple scientific ideas and processes	✓	✓	✓	✓	✓	✓
Use straightforward scientific evidence to answer questions or to support their findings	✓	✓	✓	✓	✓	✓



National Curriculum Objectives	Year 3		
	Autumn Term	Spring Term	Summer Term
Plants Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers		✓	
Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant		✓	
Investigate the way in which water is transported within plants		✓	
Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal		✓	
Animals, including humans Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat			✓
Identify that humans and some other animals have skeletons and muscles for support, protection and movement			✓
Rocks Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties	✓		
Describe in simple terms how fossils are formed when things that have lived are trapped within rock	✓		
Recognise that soils are made from rocks and organic matter	✓		
Light Recognise that they need light in order to see things and that dark is the absence of light		✓	
Notice that light is reflected from surfaces		✓	
Recognise that light from the sun can be dangerous and that there are ways to protect their eyes		✓	
Recognise that shadows are formed when the light from a light source is blocked by an opaque object		✓	



Find patterns in the way that the size of shadows change		✓	
Forces and magnets			✓
Compare how things move on different surfaces			✓
Notice that some forces need contact between two objects, but magnetic forces can act at a distance			✓
Observe how magnets attract or repel each other and attract some materials and not others			✓
Compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet, and identify some magnetic materials			✓
Describe magnets as having two poles			✓
Predict whether two magnets will attract or repel each other, depending on which poles are facing			✓

National Curriculum Objectives	Year 4		
	Autumn Term	Spring Term	Summer Term
Living things and their habitats			✓
Recognise that living things can be grouped in a variety of ways			✓
Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment			✓
Recognise that environments can change and that this can sometimes pose dangers to living things			✓
Animals, including humans			✓
Describe the simple functions of the basic parts of the digestive system in humans			✓
Identify the different types of teeth in humans and their simple functions			✓
Construct and interpret a variety of food chains, identifying producers, predators and prey			✓
States of matter		✓	
Compare and group materials together, according to whether they are solids, liquids or gases			



Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)		✓	
Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature		✓	
Sound Identify how sounds are made, associating some of them with something vibrating	✓		
Recognise that vibrations from sounds travel through a medium to the ear	✓		
Find patterns between the pitch of a sound and features of the object that produced it	✓		
Find patterns between the volume of a sound and the strength of the vibrations that produced it	✓		
Recognise that sounds get fainter as the distance from the sound source increases	✓		
Electricity Identify common appliances that run on electricity	✓		
Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers	✓		
Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery	✓		
Recognise that a switch opens and closes a circuit and associate this with whether or not a lamp lights in a simple series circuit	✓		
Recognise some common conductors and insulators, and associate metals with being good conductors	✓		



National Curriculum Objectives Working Scientifically	Year 5			Year 6		
	Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
Plan different types of scientific enquiries to answer questions, including recognising variables where necessary	✓	✓	✓			
Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary				✓	✓	✓
Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate	✓	✓	✓	✓	✓	✓
Record data and results using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs	✓	✓	✓			
Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs				✓	✓	✓
Use test results to make predictions to set up further comparative and fair tests	✓	✓	✓	✓	✓	✓
Report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations	✓	✓	✓	✓	✓	✓
Identify scientific evidence that has been used to support or refute ideas or arguments	✓	✓	✓	✓	✓	✓



National Curriculum Objectives	Year 5		
	Autumn Term	Spring Term	Summer Term
<u>Living things and their habitats</u> Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird			✓
Describe the life process of reproduction in some plants and animals			✓
<u>Animals, including humans</u> Describe the changes as humans develop to old age			✓
<u>Properties and changes of materials</u> Compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets	✓		
Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution	✓		
Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating	✓		
Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials, including metals, wood and plastic	✓		
Demonstrate that dissolving, mixing and changes of state are reversible changes	✓		
Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda	✓		
<u>Earth and space</u> Describe the movement of the Earth, and other planets, relative to the Sun in the solar system			✓
Describe the movement of the Moon relative to the Earth			✓
Describe the Sun, Earth and Moon as approximately spherical bodies			✓
Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky			✓



Forces Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object		✓	
Identify the effects of air resistance, water resistance and friction, that act between moving surfaces		✓	
Recognise that some mechanisms, including levers, pulleys and gears, allow a smaller force to have a greater effect		✓	

National Curriculum Objectives	Year 6		
	Autumn Term	Spring Term	Summer Term
<u>Living things and their habitats</u> 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			
<u>Animals, including humans</u> 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		✓	
<u>Evolution and inheritance</u> 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	✓		