Year 3 Curriculum

Maths

Mathematical objectives taken from the Year 3 National Curriculum Programme of Study
https://www.gov.uk/government/publications/national-curriculum-in-england-mathematics-programmes-of-study/national-curriculum-in-england-mathematics-programmes-of-study#year-3-programme-of-study

English

English objectives taken from the Year 3 and 4 National Curriculum Programme of Study
https://www.gov.uk/government/publications/national-curriculum-in-england-english-programmes-of-study/national-curriculum-in-england-english-programmes-of-study#years-3-and-4-programme-of-study

Science

Scientific Skills	Working scientifically	Questioning and enquiry	Observing and measuring	Investigating	Recording	Grouping and classifying
	To use practical scientific methods, processes and skills	Ask some relevant questions and use different types of scientific enquiries to answer them.	Begin to make systematic and careful observations. Take accurate measurements using standard and non-standard measurements. Begin to use a range of equipment. Begin to look for naturally occurring patterns and relationships. Help to make decisions on how to carry out an investigation	Set up simple practical experiments focusing on comparative and fair tests and begin to know when a fair test is necessary and decide how to set it up. Begin to think of more than one variable factor	Gather, record, and begin to classify and present data in a variety of ways to help answer a question. Begin to record findings using scientific vocabulary, drawings, labelled diagrams, keys, bar charts and tables. Begin to report on findings including oral and written explanations, displays and presentations. Begin to use notes, simple tables and standard units to record and analyse data.	Begin to identify similarities and differences related to scientific ideas and processes. Talk about criteria for grouping, sorting and classifying using simple keys. Begin to compare and group according to behaviour or properties, based on testing

Areas in science	Plants	Animals including humans	Rocks	Forces and magnets	Light
	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.	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.	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	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.	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.

Computing

	Text & Multimedia	Digital Image	Sound and Music	Electronic Communication
use of tools for presentation/communication	Record and present information integrating a range of appropriate media combining text and graphics in printable form and sound and video for on-screen presentations which include hyperlinks. Begin to show an awareness of the intended audience and seek feed back.	Manipulate digital images using a range of tools in appropriate software to convey a specific mood or idea	Create a simple podcast, selecting and importing already existing music and sound effects as well as recording their own.	Share ICT work they have done electronically by email, VLE, or uploading to authorised sites. Where possible seek and respond to feedback. Abide by school rules for e-safety.
	Control	**Modelling and Simulations**		**Data Logging** (links to Science and Maths)
use of tools for control and modelling	Children are able to type a short sequence of instructions and to plan ahead when programming devices on and off screen.	Use models and simulations to find things out and solve problems.		Begin to use a data logger to sense physical data (sound, light, temperature).
	Research	**Handling Information (Database and graphing)**		
use of tools to find things out	Using another curriculum area as a starting point, children ask their own questions then use ICT sources to find answers, making use of search engines, an index, menu, hyperlinks as appropriate. Children use the information or resources they have found. Children talk about using ICT to find information / resources noting any frustrations and showing an emerging understanding of internet safety.	Children use a simple database (the structure of which has been set up for them) to enter and save and save information on a given subject. They follow straight forward lines of enquiry to search their data for their own purposes. They talk about their experiences of using ICT to process data compared with other methods.		
	Individual technologies	Networking technologies		The Internet as a technology
Understanding of information technologies	Begin to show discernment in their use of computing devices and tools for a particular purpose and explain why their choice was made.	Show an understanding that their password is the key to accessing a personalised set of resources and files (e.g. My Documents).		Show an awareness that not all the resources/tools they use are resident on the device they are using. Begin to show an understanding of URLs.
E- Safety	Understand there are rules to keep them safe when communicating electronically, work within these rules understanding what they are and why they exist.			

Geography

Location knowledge	Place knowledge	Human & physical knowledge	Geographical skills & fieldwork
Name and locate countries and cities of the UK, geographical regions and their identifying human and physical characteristics, key topographical features (in hills, mountains, coasts and rivers) and land-use patterns; and understand how some of these aspects have changed over time.	Understand some of the geographical similarities and differences through studying the human and physical geography of a region of the UK.	Describe and understand some key aspects of: **Physical geography** including: rivers, mountains, volcanoes and earthquakes, and the water cycle. **Human geography** including: types of settlement and trade links.	Use world maps, atlases, globes and digital/computer mapping (google earth) to locate countries and describe features studied. Learn the eight points of a compass, and two-figure grid references (maths co-ordinates), some basic symbols and key (including the use of a simplified Ordnance Survey maps) to build their knowledge of the UK and the wider world Use fieldwork to observe and record the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

History

Historical interpretation	Historical enquiry	Organisation and communication	Knowledge and understanding of past events, people and changes in the past	Chronological understanding
Looks at 2 versions of same event and identifies differences in the accounts.	Uses printed sources, the internet, pictures, photos, music, artefacts, historic buildings and visits to collect information about the past. Asks questions such as 'how did people ….? What did people do for ….?' Suggests sources of evidence to use to help answer questions.	Uses timelines to place events in order. Understands timeline can be divided into BC and AD. Uses words and phrases: century, decade.	Uses evidence to describe past: *Houses and settlements* *Culture and leisure activities* *Clothes, way of life and actions of people* *Buildings and their uses* *People's beliefs and attitudes* *Things of importance to people* *Differences between lives of rich and poor* Uses evidence to find out how any of these may have changed during a time period. Describes similarities and differences between people, events and objects Shows changes on a timeline	Uses timelines to place events in order. Understands timeline can be divided into BC and AD. Uses words and phrases: century, decade.

Art

	Drawing	Painting	Printing	Textiles	3D	Ceramics
Media and techniques	Use drawing tools to represent tonal qualities (HB-6B, chalk and charcoal). Use viewfinders to focus in on details.	Create warm and cool colours. Explore links between colour and emotion. Explore use of acrylics and cromar paint to achieve different effects.	Make own printing blocks to create two or more colour prints. Work back into prints in a different media, e.g. by drawing, collaging or painting.	Learn batik techniques. Learn two or more decorative stitches – diagonal basting, cross-stitch and back stitch.	Consider the use of movement in 3D work, e.g. mobiles.	Add coils to extend a thumb pot. Decorate by adding coils or pressing into the clay.

	Colour	Pattern and texture	Line and tone	Shape, form and space
Elements of art	Recognise and make up names for cool and warm colours. Use a restricted colour range to create a feeling.	Use viewfinders to examine natural texture and pattern, e.g. the lines on a leaf. Recreate patterns and textures in clay, collage, prints and painting.	Select the appropriate tool to represent the desired line when drawing, e.g. a harder pencil for a feinter line or charcoal for a thicker, darker line. Look at how light changes across an object and represent the tonal qualities.	Draw with tone to create form. Create 3D forms considering different viewpoints.

Design & Technology

Design		Making		Evaluate			Technical Knowledge	Food	
Understanding contexts, users and purposes	Generating, developing, modelling and communicating ideas	Planning	Practical skills and techniques	Own ideas and products	Existing products	Key events and individuals	Making Products work	Where food comes from	Food preparation, cooking and nutrition
• work within a range of contexts, such as the home, school, leisure, culture, • describe the purpose of their products • explain how particular parts of their products work	• share ideas through discussion • model their ideas using prototypes • use annotated sketches and exploded diagrams to develop and communicate their ideas • use computer-aided design to develop and communicate their ideas	• select tools and equipment suitable for the task • select materials and components suitable for the task	• follow procedures for safety and hygiene • use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components	• identify the strengths and areas for development in their ideas and products • consider the views of others, to improve their work	• how well products have been designed • how well products have been made • why materials have been chosen • what methods of construction have been used • how well products work • how well products achieve their purposes • how well products meet user needs and wants	pupils should know: • about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products	• how to use learning from science to help design and make products that work • that materials can be combined and mixed to create more useful characteristics • that mechanical and electrical systems have an input, process and output • the correct technical vocabulary for the projects they are undertaking	• that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world	• how to prepare and cook a variety of predominantly savoury dishes safely and hygienically • how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking
• gather information about the wants of particular individuals and groups • develop design criteria alongside the teacher and use these to inform their ideas these must include reference to appearance, safety and reliability.	• generate realistic ideas, focusing on the needs of the user	• order the main stages of making	• measure, mark out, cut and shape materials and components with some accuracy • assemble, join and combine materials and components with some accuracy • apply a range of finishing techniques, including those from art and design, with some accuracy	• refer to their design criteria as they design and make	• who designed and made the products • where products were designed and made • when products were designed and made • whether products can be recycled or reused		• how mechanical systems such as levers and linkages or pneumatic systems create movement • how simple electrical circuits and components can be used to create functional products • how to program a computer to control their products • how to make strong, stiff shell structures • that a single fabric shape can be used to make a 3D textiles product • that food ingredients can be fresh, pre-cooked and processed		• that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The eat well plate • that to be active and healthy, food and drink are needed to provide energy for the body

Music

	Pulse	Pitch	Rhythm	Dynamics	Tempo	Timbre	Structure and texture
Elements of music	Internalise the pulse in music.	When composing change the pitch of their music. Involving instruments or voice.	Know the difference between pulse and rhythm. Begin to know minim, crotchet, semibreve. introduce quaver note values.	When composing change the dynamics in their music. Using loud and quiet and then getting louder, getting quieter.	Begin to know the number of beats in a crotchet and minim and semibreve.	Recognise and use changes in timbre and select for a particular purpose.(sound quality- smooth, crisp, scratchy, rattling, tinkling etc.),	Effectively choose, order, combine and control sounds

	Voice	Tuned and untuned instruments	Listening and applying knowledge and understanding	Appraising	Composing	Performing
Instrumental and music skills	Sing songs from memory with accurate pitch and in tune. Show control in voice and pronounce the words in a song clearly (diction).	Use un tuned instruments within their own music and to demonstrate understanding of rhythm. Play notes on instruments clearly and including steps/ leaps in pitch. (C, B, A) (please note that c and a when played together sound tuneful). Improvise (including call and response) within a group using 2 or 3 notes.	Listen with sustained attention to detail and recall sounds. Select and name instruments in a piece of music. Share likes, dislikes and how it makes them feel? Share possible ideas of how a group could improve their composition.	Start to use musical dimensions vocabulary to describe music– duration, timbre, pitch, dynamics, tempo, texture, structure. Use these words to identify where music works well/ needs improving.	Compose and perform melodies using two or three notes focus on tempo, pitch and dynamics. Begin to understand how to write C,B,A, on a staff. Use sound to create abstract effects (including using ICT). Create/ improvise repeated patterns with a range of instruments. Use silence for effect and know symbol for a rest	Maintain a simple part within an ensemble. Follow a leader e.g. when they ask them to get louder, quieter using conductor cards or actions.

Modern Foreign Languages - Spanish

Speaking and Listening	Reading	Writing	Grammar
Listen to and respond to familiar spoken words. Communicate with others using familiar spoken words Use correct pronunciation in spoken work.	Read and understand some familiar words and phrases in written form. Read aloud in chorus with confidence and enjoyment from a known text	Write some familiar simple words using a model Write some familiar words from memory.	Recognise masculine and feminine forms of key vocabulary.

Physical Education

Gymnastics	Games	Dance	Athletics	Outdoor and Adventurous	Healthy life styles
• Applies compositional ideas independently and with others to create a sequence. • Copies, explores and remembers a variety of movements and uses these to create their own sequence. • Describes their own work using simple gym vocabulary. • Beginning to notice similarities and differences between sequences. • Uses turns whilst travelling in a variety of ways. • Beginning to show flexibility in movements • Beginning to develop good technique when travelling, balancing, using equipment etc	• Understands tactics and composition by starting to vary how they respond. • Vary skills, actions and ideas and link these in ways that suit the games activity. • Beginning to communicate with others during game situations. • Uses skills with co-ordination and control. • Develops own rules for new games. • Makes imaginative pathways using equipment. • Works well in a group to develop various games. • Beginning to understand how to compete with each other in a controlled manner. • Beginning to select resources independently to carry out different skills.	• Beginning to improvise independently to create a simple dance. • Beginning to improvise with a partner to create a simple dance. • Translates ideas from stimuli into movement with support. • Beginning to compare and adapt movements and motifs to create a larger sequence. • Uses simple dance vocabulary to compare and improve work.	• Beginning to run at speeds appropriate for the distance. • e.g. sprinting and cross country • Can perform a running jump with some accuracy • Performs a variety of throws using a selection of equipment. • Can use equipment safely and with good control.	• Develops listening skills. • Creates simple body shapes. • Listens to instructions from a partner/ adult. • Beginning to think activities through and problem solve. • Discuss and work with others in a group. • Demonstrates an understanding of how to stay safe.	• Can describe the effect exercise has on the body • Can explain the importance of exercise and a healthy lifestyle. • Understands the need to warm up and cool down.