Year 2 Curriculum

Maths

Mathematical objectives taken from the Year 2 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-2-programme-of-study

English

English objectives taken from the Year 2 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#year-2-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 with increasing confidence -	Ask questions about the world around us.	**Observe** closely, using simple equipment. Use **observations and ideas** to suggest answers to questions.	Perform simple tests. To discuss my ideas about how to find things out. To say what happened in my investigation.	Gather and record data to help in answering questions. Record simple data. Record and communicate their findings in a range of ways. Can show my results in a table that my teacher has provided.	Identify and classify. Observe and identify, compare and describe.

Areas in science	**Plants**	**Animals including humans**	**Materials**	**Living things and their habitat**
	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	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.	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.	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 microhabitats 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.

Computing

	Text & Multimedia	Digital Image	Sound and Music	Electronic Communication
use of tools for presentation/communication	Generate their own work, (with help where appropriate with multimedia) combining text, graphics and sound. Save and retrieve and edit their work.	Use a range of tools in a paint package / image manipulation software to create / modify a picture to communicate an idea. Create a simple animation to tell a story.	Compose music from icons. Produce a simple presentation incorporating sounds the children have captured, or created	Work collaboratively by email to share and request information of another class or story character. Begin to understand the need to abide by school e-safety rules.

	Control	Modelling and Simulations	Data Logging (links to Science and Maths)
use of tools for control and modelling	Control a device, on and off screen, making predictions about the effect their programming will have. Children can plan ahead.	Children are able to play an adventure game and use a simple simulation, making choices and observing the results. Their conversation shows they understand that computers are good at replicating real life events and allowing them to explore contexts that are otherwise not possible.	As a class 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	Children use a search engine to find specific relevant information to use in a presentation for a topic. They save and retrieve their work.	Use a graphing package to collect, organise and classify data, selecting appropriate tools to create a graph and answer questions. Enter information into a simple branching database, database or word processor and use it to answer questions. They save, retrieve and edit their work.

	Individual technologies	Networking technologies	The Internet as a technology
Understanding of information technologies	Show an awareness of a range of inputs to a computer (IWB, mouse touch screen, microphone, keyboard, etc)	Begin to show an awareness that computers can be linked to share resources	Use websites and demonstrate an awareness of how to manage their journey around them (e.g. using the back/forward button, hyperlinks)

E- Safety	Discuss personal safety when using the Internet, including at home Understand and abide by internet safety rules Know how to report inappropriate content to a responsible adult Know who to turn to if they feel threatened in any way

Geography

Location knowledge	Place knowledge	Human & physical knowledge	Geographical skills & fieldwork
Name and locate the world's seven continents and five oceans.	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 non-European country concentrating on islands and sea sides (different location to yr 1)	Use basic geographical vocabulary to refer to a less familiar: **key physical features** including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season, weather **Key human features** including: city, town, village, factory, farm, house, office, port, harbour, shop of a contrasting non-European country.	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. To use the four compass directions (North, South, East, West) and locational and directional language (eg: near & far, left & right) to describe the location of features and routes on a map.

History

Historical interpretation	Historical enquiry	Organisation and communication	Knowledge and understanding of past events, people and changes in the past	Chronological understanding
Looks at books and pictures (and eye-witness accounts, photos, artefacts, buildings and visits, internet). Understands why some people in the past did things.	Looks carefully at pictures or objects to find information about the past. Asks and answers questions such as: 'what was it like for a ….?', 'what happened in the past?', 'how long ago did …. happen?', Estimates the ages of people by studying and describing their features.	Describes objects, people and events. Writes own date of birth. Writes simple stories and recounts about the past. Draws labelled diagrams and writes about them to tell others about people, events and objects from the past.	Uses information to describe the past. Uses information to describe differences between then and now. Recounts main events from a significant in history. Uses evidence to explain reasons why people in past acted as they did.	Recount changes in own life over time Puts 3 people, events or objects in order using a given scale. Uses words and phrases such as recently, before, after, now, later. Uses past and present when telling others about an event.

Art

	Drawing	Painting	Printing	Textiles	3D	Ceramics
Media and techniques	Explore different grades of pencil (HB – 6B). Make collections of drawings around a theme using a variety of drawing tools and use as a starting point for other artwork.	Make hues of one colour, e.g. different oranges by varying the amount of red and yellow. Mix a brown (tertiary colour).	Make two or more coloured press prints.	Learn to join two pieces of fabric together by over-stitching. Add cords, plaits, buttons, beads etc to fabric. Weave on a card frame.	Use wire and willow to form structures.	Make a thumb pot. Join two thumb pots together to form the basis of a figure or an animal.

	Colour	Pattern and texture	Line and tone	Shape, form and space
Elements of art	Describe colours as hues of a colour, and introduce tertiary colours.	Explore arranged and accidental pattern. Collect and categorise texture – use in 2D and 3D artwork, including textiles and ceramics.	Associate the type of line made with a particular tool. Observe and discuss lighter and darker areas of objects.	Look at how much space objects take up and talk about objects being in front of or behind each other and apply to 2D work. Use clay and willow/wire to create 3D forms.

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 confidently within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment • state what products they are designing and making • say whether their products are for themselves or other users • describe what their products are for • say how their products will work • say how they will make their products suitable for their intended users • use simple design criteria to help develop their ideas this criteria must include appearance, functionality, safety and reliability.	• generate ideas by drawing on their own experiences • use knowledge of existing products to help come up with ideas • develop and communicate ideas by talking and drawing • model ideas by exploring materials, components and construction kits and by making templates and mock ups • use information and communication technology, where appropriate, to develop and communicate their ideas	• plan by suggesting what to do next • select from a range of tools and equipment, explaining their choices • select from a range of materials and components according to their characteristics	follow procedures for safety and hygiene • use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components • measure, mark out, cut and shape materials and components • assemble, join and combine materials and components • use finishing techniques, including those from art and design	talk about their design ideas and what they are making • make simple judgements about their products and ideas against design criteria • suggest how their products could be improved	explore: • what products are • who products are for • what products are for • how products work • how products are used • where products might be used • what materials products are made from • what they like and dislike about products	Not a requirement in KS1	should know: • about the simple working characteristics of materials and components • about the movement of simple mechanisms such as levers, sliders, wheels and axles • how freestanding structures can be made stronger, stiffer and more stable • that a 3-D textiles product can be assembled from two identical fabric shapes • that food ingredients should be combined according to their sensory characteristics • the correct technical vocabulary for the projects they are undertaking	pupils should know: • that all food comes from plants or animals • that food has to be farmed, grown elsewhere (e.g. home) or caught	pupils should know: • how to name and sort foods into the five groups in The eat well plate • that everyone should eat at least five portions of fruit and vegetables every day • how to prepare simple dishes safely and hygienically, without using a heat source • how to use techniques such as cutting, peeling and grating

Music

	Pulse	Pitch	Rhythm	Dynamics	Tempo	Timbre	Structure and texture
Elements of music	Identify the pulse in music.	Use pitch changes to communicate an idea. Recognise changes in pitch (high and low) independently.	Create sequences of long and short sounds- rhythmic patterns Introduce minim, crotchet, note values.	Recognise and use changes in dynamics (loud and quiet) getting louder, getting quieter.	Make and control long and short sounds using voices and instruments, playing by ear and including simple improvisation Recognise changes in tempo (fast and slow)	Recognise and use changes in timbre and select for a particular purpose.(sound quality- smooth, crisp, scratchy, rattling, tinkling etc.),	Order sounds to create an effect

	Voice	Tuned and untuned instruments	Listening and applying knowledge and understanding	Appraising	Composing	Performing
Instrumental and music skills	Sing songs in ensemble following the tune (melody) well. Use voice to good effect understanding the importance of warming up first. Use their voices expressively to sing songs, speak chants and rhymes.	Control playing instruments so they sound as they should. Use conductor cards or the children's own ideas on actions that could be used to stop them, make them play louder etc.	Listen carefully and recall short rhythmic and melodic patterns. Make own sounds and symbols to make and record music. Know music can be played or listened to for a variety of purposes (in history/ different cultures). Listen with sustained concentration to live and recorded music and discuss their likes dislikes, instruments they can hear. .	Start to recognise different instruments. Share likes and dislikes about a piece of music.	Carefully choose sounds to achieve an effect (including use of ICT). Create short musical patterns. Start to compose with two or three notes (C, B, A). Continue to use graphic notation to record their own musical compositions. Develop their own ideas for notation.	Perform in ensemble with instructions from the leader. Begin to follow a leader e.g. when they ask them to get louder, quieter using conductor cards or actions.

Physical Education

Gymnastics	Games	Dance	Athletics	Healthy life styles
• Explore and create different pathways and patterns. • Uses equipment in a variety of ways to create a sequence • Link movements together to create a sequence	• Confident to send the ball to others in a range of ways. • Beginning to apply and combine a variety of skills (to a game situation) • Develop strong spatial awareness. • Beginning to develop own games with peers. • Understand the importance of rules in games. • Develop simple tactics and use them appropriately. • Beginning to develop an understanding of attacking/ defending	• Copies and explores basic movements with clear control. • Varies levels and speed in sequence • Can vary the size of their body shapes • Add change of direction to a sequence • Uses space well and negotiates space clearly. • Can describe a short dance using appropriate vocabulary. • Responds imaginatively to stimuli.	• Can change speed and direction whilst running. • Can jump from a standing position with accuracy. • Performs a variety of throws with control and co-ordination. • preparation for shot put and javelin • Can use equipment safely	• Can describe the effect exercise has on the body • Can explain the importance of exercise and a healthy lifestyle.