

# Key Skills 2018-2020

(2-year rolling programme)

YEAR 5



#### **Drawing Skills**

Much of this work is done in sketch books to record observations and use them to review and revisit ideas.

\*Media chosen for breadth of experience and including a basic drawing media kit in each class. More frequent use of 2 or 3 media enables skills to develop through practice.

\*Children begin to select paper appropriate to the media.

\*Explore use of cross-hatching, shading, and thick/thin lines to show the quality of **tone** with a variety of black and white media. Copy sections of artists' drawings.

\*Use the above to show **form** through observations of shadows.

\*Explore an increasing range of marks and <u>textures</u> with a variety of media.

\*Refine skills with dry pastels creating areas of <u>texture</u>, <u>colour</u> blends and sharper marks. Build

up layers of marks and smudges. \*Explore representation of **space** with distant tones being paler, distant shapes smaller, close details visible – distant objects are shapes without detail. \*Study/sorting colours into tones eg dark blues to light blues and use colours as tones eh dark blues for shadows, yellows for brighter parts. \*Begin to try detailed pencil and ink drawings coloured with pointed brushes and water colours or Brusho dyes. \*Analysis of an object or view by making several drawings from different viewpoints. \*Use mixed media. \*Attention to shape, space, texture, tone, line, form and colour \*Make several drawings of an object each with a focus on a different visual element.

#### **Painting and Printing Skills**

Continuing to apply and develop skills introduced in KS1 and Years 3&4 – all skills are learned and practised over long periods... Experimenting with media and tools before making final work and collecting these explorations in Sketchbooks. Learning Primary and secondary colours / sorting into colour wheel.

Experimenting with media and tools before making final work and collecting these explorations in Sketchbooks.

Learning Primary and secondary colours / sorting into colour wheel

Continue developing skills with 2 reds, 2 blues, 2 yellows, black and white.

# Choosing mixing and using colour:

- \*Observe and mix <u>colours</u> to match changes made by sunlight changes.
- \*Explore tones made by mixing a light colour (not white) with a dark colour (not black) eg. Lemon yellow with a dark red...
- \*Use knowledge of colour mixing to show <u>space</u> eg. Thin pale colours look distant; intense, warm, thick colours look closer.

\*Use knowledge of tone to show shadows giving illusion of form.

#### **Mark Making**

- \*Build up layers of paint, <u>textures</u> and <u>colours</u>, working on a painting on several occasions.
- \*Drawing on experience to select and use tools in appropriate ways to achieve intentions.
- \*Use accidental learning in creative ways.

#### **Mixing Paint**

- \*Develop awareness of how the quality and <u>texture</u> of paint effects the 'mood' of the picture; delicate, thin colours or rough, lumpy colours.
- \*Mixing and using thin, medium, thick or textured paint appropriate to intentions.

#### **Resist Printing**

\*Explore stencils to build up patterns of overlapping shapes and colours – apply paint with sponge or roller

\*Further explore mono-print with ready mix+ squirt washing-up liquid paint on table top and wetted paper — then experiment with bits of wood, rags, etc. for making marks in the ink/ paint, then press paper on table and take-off an image. Can over print in different colours to begin to build up colour-mixing and idea of in front/behind.

#### **Relief printing**

\*Explore <u>Pattern</u> and <u>shape</u> printing with found objects; cut vegetable surfaces;

\*Make printing block by gluing shapes cut from press print onto card; roll over with coloured ink and print onto white paper/coloured paper — children work in pairs — one holding, other rolling etc experiment with repeated prints and link to maths...explore overprinting in at least 2 colours...

#### **Sculpture Skills**

Drawing before making prepares children in order to plan their 3D outcome.

#### **Textiles**

\*Explore sewing as way of drawing coloured lines and applique shapes.

*Weave pictures and patterns
into garden netting or open
weave net curtains using wool.
Fabric strips etc.
*Callagt and salagt frame aida

\*Collect and select from a wide variety of <u>colours</u> from magazines; sort by colour and tone.

**Construction with wire.** 



# E-safety & E-sense

Pupils should be taught to use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour, identify a range of ways to report concerns about content and contact? Be discerning in evaluating digital content.

Can I protect my password and other personal information?

Can I explain why I need to protect myself and my friends and the best ways to do this, including reporting concerns to an adult?

Can I understand that anything I post online can be seen, used and may affect others?

Can I talk about the dangers of spending too long online or playing a game?

Can I explain the importance of communicating kindly and respectfully?

Can I discuss the importance of choosing an age-appropriate website or game?

Can I explain why I need to protect my computer or device from harm?

Can I understand which resources on the internet Can I download and use?

#### **Programming**

Pupils should be taught to 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? 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.

Can I decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program?

Can I refine a procedure using repeat commands to improve a program?

Can I use a variable to increase programming possibilities?

Can I change an input to a program to achieve a different output?

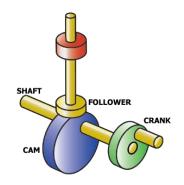
Can I use 'if' and 'then' commands to select an action?

Can I talk about how a computer model can provide information about a physical system?

Can I use logical reasoning to detect and debug mistakes in a program?

	Can I use logical thinking, imagination and creativity to extend a program?
Handling Data	Pupils should be taught to 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.
	Can I use a spreadsheet and database to collect and record data?
	Can I choose an appropriate tool to help me collect data?
	Can I present data in an appropriate way?
	Can I search a database using different
	operators to refine my search?
	Can I talk about mistakes in data and suggest
	how it could be checked?
Multimedia	Pupils should be taught to 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.
	Can I use text, photo, sound and video editing tools to refine my work?
	Can I use the skills I have already developed to create content using unfamiliar technology?
	Can I select, use and combine the appropriate technology tools to create effects that will have an impact on others?

	Can I select an appropriate online or offline tool to create and share ideas?
	Can I review and improve my work and support others to improve their work?
Technology in our lives	Pupils should be taught to 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.
	Can I describe different parts of the internet?
	Can I use different online communication tools for different purposes?
	Can I use a search engine to find appropriate information and check its reliability?
	Can I recognise and evaluate different types of information I find on the World Wide Web?
	Can I describe the different parts of a webpage?
	Can I find out who the information on a webpage belongs to?



#### **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 computeraided design.

Can I generate plans and designs based on ideas and information that takes account of the users' views and the intended purpose?

Can I look at mechanical products to see how they function and meet the user's needs?

Can I consider safety and reliability when planning my product?

Can I use simple prototypes to test ideas?

Can I plan what to do next, suggesting a detailed sequence of actions and alternatives if needed?

#### 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.

Can I select a range of appropriate tools to cut or join materials with accuracy and precision?

Can I use a range of tools and equipment to measure, mark out and shape materials and components accurately?

Can I identify and apply an appropriate finishing technique to ensure a high quality end product?

	Can I join and combine a range of materials in permanent and temporary ways? Can I use a drill to make an offcentre hole? Can I make complex mock-ups and templates?
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.  Can I test and evaluate products to identify the variants which may affect the function of my product?
	Can I check my work as it develops and modify may plans if any changes are made?  Can I take into account the original criteria when evaluating my product?  Can I reflect on my progress and identify ways?  Can I improve my product?

# **Electrical and Mechanical Components**

Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]

Can I explore and describe how electrical circuits with switches can be used?

Can I use switches in a range of circuits to control components, eg, lights in a lighthouse, a movement sensor in a burglar alarm?

Can I use my knowledge of conductors and insulators when constructing circuits?

Can I talk in depth about the hazard and safety issues associated with electricity?

Can I apply appropriate safety measures when constructing circuits?

Can I talk about how electricity can be used to control movement?

Can I explore and use a complex control system, eg, a light sensor?

#### **Food Technology**

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?

Can I apply the rules for basic food hygiene and other safe practices eg, hazards relating to the use of ovens?

Can I talk in detail about the characteristics of a range of food and ingredients and where the food comes from?

Can I talk about the impact of changing proportions within a recipe?

Can I talk in scientific terms about the physical and chemical changes that take place when food is cooked?

Can I understand how a variety of the ingredients are grown, reared, caught and processed?

Mechanisn	s. Axles, Pulleys and
Gears	

Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].

Can I choose and use a range of sliders and levers accurately to create a range of effects?

Can I use simple mechanisms eg, pulleys, gears, cams, cogs?

Can I attach to motors for electrical control?

Can I use the computer to operate switch and devise simple programmes to control own models?

Can I describe in detail the way in which an axle and chassis help a vehicle to move?

Can I talk about how pulleys and drive systems can be driven by motor and computer?

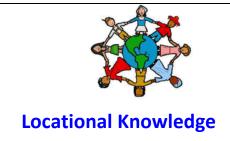
#### **Structures**

Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

Can I construct regular free standing 3D frames?

Can I use techniques for reinforcing and strengthen structures?

	Can I use construction kits and
	building instructions to identify
	how structures are established
	and strengthened?
Textiles	Can I create my own patterns and
	templates?
	Can I select an appropriate
	material to create a product?
	Can I use a wide range of
	techniques to add colour, texture
	and pattern to fabric?
	Can I sew using a range of
	stitches including, backward
	running stitch and over sewing?
	Can I join fabrics in a range of
	different ways using zips, tie
	clasp, toggles, press-studs and
	buttons?



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).

Can I locate the main countries of Europe, including the location of Russia, and identify the capital cities?

	On a world map, Can I locate the main countries in Africa, Asia and Australasia/Oceania and identify their main environmental regions, key physical and human characteristics, and major cities?  Can I map how land use has changed over time?
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
- 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

Can I describe and understand key aspects of physical geography, including: volcanoes and earthquakes, focussing on plate tectonics and the ring of fire?

Can I identify and describe in detail the impact of change on the lives of people after a natural disaster?

Can I describe and understand key aspects of physical geography, including: coasts, rivers, and the water cycle

including transpiration; climate zones, biomes and vegetation belts? For example, the Plym and Tamar.

Can I consider the impact of a river on people and the landscape?

Can I discuss the issues relating to water supply and the impact on people?

Can I begin to describe and understand key aspects of physical geography, including: volcanoes and earthquakes?

Can I describe and understand key aspects of human geography, including types of settlements and land use, economic activity including trade links and the distribution of natural resources including energy, food, minerals and water?

### **Geographical Skills and Field Work**

Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.

Use the 8 points of a compass, 4and 6-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.

Can I use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied?

Can I use the eight points of a compass to give and receive direction?

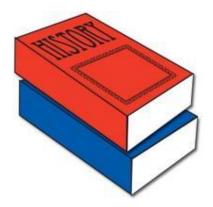
Can I map a route using fourfigure grid references but know that six-figure grid references can help you find a place more accurately than four?

Can I use basic symbols and the key (including the use of Ordnance Survey maps) to build knowledge of the United

Kingdom and the wider world?

Can I use fieldwork to observe, measure and record the human and physical features in the local area? For example, questionnaires and colour coded keys.

Can I measure straight-line distances on large-scale maps using a scale bar and draw scaled maps?



# Finding Out About the Past (Enquiry)

Changes within living memory? Where appropriate, these should be used to reveal aspects of change in national life?

By the end of year 6...

Can I answer questions about the past selecting information from a wide range of sources?

Can I use appropriate terminology and methods to present information about the past?

Can I identify different ways in which people have represented and interpreted the past?

Can I talk about and give reasons for an event being interpreted in a range of different ways?

Can I talk about why some written sources may give a negative view or account?

Can I explore a range of sources of information/accounts about an archaeological site?

	Can I select, combine and present
	information from more than one source?
	Can I give reasons for negative views and
	accounts in written sources of information?
	Can I recognise some of the strengths and
	limitations in terms of archaeological
	evidence?
<b>Finding Out About the</b>	Develop a chronologically secure
Past	knowledge and understanding of British,
(Chronology)	local and world history, establishing clear
· • • • • • • • • • • • • • • • • • • •	narratives within and across the periods
	they study?
	Can I describe the key characteristics and
	features of a range of different periods of
	history?
	Can I describe changes that have taken place
	within and across historical periods?
	Can I use historical terms effectively to
	describe periods within history?
	Can I place civilisations and events on a
	timeline showing an understanding of the
	terms BC and AD?
	Can I compare and contrast features of
	historical periods identifying similarities and
	differences?
	Can I describe and analyse the impact of
	change within and between periods in the
	past?
	Can I analyse and evaluate the cause and
	effect of changes that took place in the past?

#### **Historical Events**

# Can I describe features of past events and make links between them?

Can I describe a range of different features of key historical events?

Can I compare and contrast events from different historical periods?

Can I explain and give reasons for events in the present and past?

Can I talk about the impact of events on different groups within society at that time?

Can I understand and explain the reasons for, and results of, key historical events?

Can I interpret and evaluate a key historical event from more than one perspective or view point?

Can I support my evaluations with a range of evidence from a range of sources?

# Lifestyles of People in the Past

# Significant historical events, people and places in their own locality.

Can I identify and describe features and characteristics of past societies?

Can I compare and analyse the factors that caused change in the past?

Can I talk about the impact of change on past societies, e.g. displacement due to war?

Can I describe and give reasons for the beliefs held by different societies in the past?

Can I compare and contrast the distinctive features of past societies?

# Significant Historical People

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, i.e. Elizabeth I, Queen Victoria, Christopher Columbus, Neil Armstrong, William Caxton, Tim Berners-Lee, Pieter Bruegel the Elder, LS Lowry, Rosa Parks, Emily Davison, Mary Seacole, Florence Nightingale and Edith Cavell.

Can I use a range of sources of information to find out about significant historical people from a key historical period?

Can I compare and contrast a range of information about a significant historical person?

Can I use a wide range of evidence to compare and analyse the lives of significant historical people from the same and different historical periods?



#### **Speaking/Oral**

Engage in conversations; 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. Broaden their vocabulary and develop their ability to understand new words that are introduced into familiar written material, including through using a dictionary. Describe people, places, things and actions orally and in writing.

Can I engage in conversation and express opinions as a response to others?

Can I speak in full sentences using familiar vocabulary?

	Can I develop accurate pronunciation of words for familiar words or phrases?
	Can I include intonation so that others understand what I am reading aloud?
	Can I present ideas and information orally to a range of audiences?
	Can I use a dictionary understand new words?
	Can I introduce new words into my written works?
	Can I orally describe people, places and things?
Writing	Explore patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words. 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.  Can I learn and memorise phrases?
	Can I write phrases from memory?  Can I adapt phrases from memory to
	create new sentences?
	Can I express ideas clearly by using memorised phrases?

	Can I write describes about people, places and things?
Listening/ Aural	Listen attentively to spoken language and show understanding by joining in and responding. Explore patterns and sounds of language through songs and rhymes and link the spelling, sound and meaning of words.
	Can I listen attentively to spoken language and respond by joining in?
	Can I explore patterns and sound through songs and rhymes?
	Can I identify meaning of words through songs and rhymes by recognising patterns and sound?
Reading	Read carefully and show an understanding of words, phrases and simple writing. Appreciate stories, songs, poems and rhymes in the language.
	Can I discuss my understanding of texts that I have read?
	Can I respond to what I have read in written form?
	Can I appreciate stories/ songs/ poems/rhymes in languages?



Singing	Pupils should be taught to perform in solo and ensemble contexts, using their voices with increasing accuracy, fluency, control and expression.
	Can I maintain my own part in rounds or part songs with an awareness of how different parts fit together to achieve the intended effect?
	Can I sing more melodically complex songs with increasing control of breathing, posture and sound projection?
Playing	Pupils should be taught to play and perform in solo and ensemble contexts, playing musical instruments with increasing accuracy, fluency, control and expression.
	Can I maintain my own part in a

Can I maintain my own part in a performance with an awareness of how different parts fit together to achieve the intended effect?

Improvising and Composing	Pupils should be taught to improvise and compose music for a range of purposes using the inter-related dimensions of music.  Can I explore, select and combine a range of different sounds to
	compose a soundscape?  Can I compose music with a partner or in a group with a focus on combing musical dimensions and know how to make improvements?
Notation	Pupils should be taught to use and understand staff and other notations.
	Can I use staff notation to record parts of my composition?
Listening	Pupils should be taught to listen with attention to detail and recall sounds with increasing aural memory.
	Can I identify moods in music and how musical dimensions contribute to this?

	Pupils should be taught to appreciate and understand the wide range of high quality live and recorded music drawn from different traditions and from great composers and musicians.
	Can I recognise styles from other countries and cultures, comparing and contrasting use of the music dimensions and challenging stereotypes?  Can I show an understanding of the above in my arrangements and composition.
History	Pupils should be taught to develop an understanding of the history of music.  Can I identify clear musical
	features in the work of great composers and musicians?



#### **Gymnastics**

Pupils should be taught to develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]

By the end of year 6???

Can I link ideas, skills & techniques with control, precision & fluency when performing basic skills?

I understand composition by performing more complex sequences

Can I describe how to refine, improve & modify performances.

Can I demonstrate specific aspects of warm-up & describe effects of exercise on the body?

(Exceeding- Gifted and talented)

Can I perform & create movement sequences with some complex skills & displaying accuracy & consistency?

Can I select & use a wide range of compositional skills in complex sequences alone & in groups?
Can I show an ability to innovate?

Can I analyse skills & can suggest ways to improve quality of performance showing sound knowledge & understanding?
Can I lead own warm up & demonstrates all round safe practice?

#### **Dance**

Pupils should be taught to perform dances using a range of movement patterns

Compare their performances with previous ones and demonstrate improvement to achieve their personal best?

By the end of year 6???

Can I demonstrate precision, control & fluency in response to stimuli?

Can I vary dynamics & develop actions with a partner or as part of a group?

Can I continually demonstrate rhythm & spatial awareness?

Can I modify my performance & that of others as a result of observation & basic understanding of the structure of the body?

(Exceeding- Gifted and talented)

Can I perform & create motifs in a variety of dance styles with accuracy & consistency?

Can I select & use a wide range of compositional skills to demonstrate ideas?

Can I suggest ways to improve quality of performance showing sound knowledge & understanding?

Can I lead my own warm up & demonstrate all round safe practice?

#### Games

Pupils should be taught to 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?

By the end of year 6??? Can I control and catch a ball & accurately pass whilst moving?

Can I take part in conditioned game with understanding of tactics & rules?

Can I move with a ball in opposed situations (unihoc / football)

I understand / use principles of warm up & why exercise is good for health. (Exceeding- Gifted and talented) Can I control movement with a ball in opposed situation whilst moving? Can I control movement with a ball in opposed situation whilst moving? Can I advise and help others in their techniques in a game? I understand & explain short term effects of exercise, warming, cooling. I understand & can explain long term effects of exercise. **Athletics** Pupils should be taught to develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics] Compare their performances with previous ones and demonstrate improvement to achieve their personal best? By the end of year 6??? Can I improve and sustain running technique at different speeds? Can I demonstrate accuracy &

technique in a range of throwing &

Can I identify & explain good athletic

jumping actions?

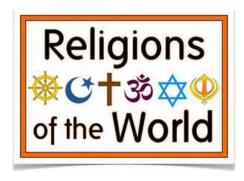
performance?

Can I describe the changes in my body when running, jumping & throwing? (Exceeding- Gifted and talented)
Can I demonstrate good control, strength, speed & stamina in a variety of athletic events?

I understand how to apply athletic skills & tactics to the competitive situation.

Can I explain how to improve technique in a variety of events?

I understand & can explain the short & long term effects of exercise, and I understand the need for specific warm up& cool down.



	Can I explain the impact of and connections between ideas?
Knowing about and understanding religions and world views	Can I explain the impact of and connections between practices?
	Can I explain the impact of and connections between viewpoints?
Expressing and communicating ideas related to religions and worldviews	Can I explain diverse ideas clearly in various forms?  Can I explain diverse viewpoints clearly in various forms?
Gaining and deploying the skills needed for studying religions and world views	Can I investigate why religions and worldviews matter?  Can I explain why religions and worldviews matter?



Planning	Can I raise questions about my local environment throughout the year?
	Can I research the work of
	naturalists and behaviourists?
Obtaining evidence	Can I observe life-cycle changes
Observation	in a variety of living things?
Obtaining evidence Practical	
Obtaining evidence	
Measurement	
Presenting evidence	
Considering and evaluating evidence	