

Key Skills 2019-2020

YEAR 3



#### **Drawing Skills**

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

\*Explore marks, <u>textures</u> and the <u>tonal</u> range of HB and 4B pencils; lightest to darkest

\*Explore qualities of <u>line</u> with a variety of media.

\*Develop vocabulary to describe qualities of <u>texture</u>, <u>tone</u>, <u>line</u>, <u>shape</u> and movement created in mark-making experiments.

\*Explore the use of shading to create shadows and <u>form.</u>
Build up <u>textures</u> and <u>patterns</u> with layers of marks.

## Painting and printing Skills

Experimenting with media and tools before making final work and collecting these explorations in Sketchbooks Learning Primary and secondary colours / sorting into colour wheel.

Choosing mixing and using colour:

\*Mixing and sorting colours into sequences of change; sorting into a <u>colour</u> wheel. Learning 'primary' and 'secondary' <u>colours</u>. Use 2 blues, 2 yellows, 2 reds, black and white.

\*Making small adjustments to colour mixes to match observations.

\*Growing awareness of the huge diversity of colours both natural and manufactured.

\*Mixing using only 3 colours – red, white & yellow; 2 blues and 1 red etc. Developing vocabulary to describe results.

\*Mixing tones of one colour (lightness – darkness) Use black and white for grey tones and black, white and another colour. Sort into graded sequences.

#### **Mark Making**

- \*Using tools to drag or scrape one colour over another, creating textures.
- \*Make as many marks as possible with one brush.
- \*Experiment with paints and marks on a variety of papers. Describe effects.
- \*Practice fine control with small pointed brushes and water colour or inks & fine brushes.
- \*Build up layers of marks, <u>colours</u> and <u>textures</u> working on a painting on several occasions.

#### **Mixing Paint**

\*For small details mix paint with bristle brushes, apply to painting with soft /fine haired pointed brush. Control consistency of mix to avoid thin runny paint for detail work. Look after brushes lay them down to preserve point.

\*Use thick or thin paint appropriate to intentions

#### Sculpture Skills

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

#### **Modelling Clay**

- \*Explore surface <u>texture</u> on plasticine using found objects and tools.
- \*Roll out clay to make slabs/tiles and decorate with <u>pattern</u> & <u>texture</u> by pressing objects in or adding raised up (relief) using slip to stick to roughed-up surface.
- \*Learn how to make a thumb or pinch pot.
- \*Join two thumb pots together to make larger hollow forms.
- \*Use modelling tools to help shape, fix, texture pots.
- \*Use bits and pieces of clay to add on surface detail and pattern.



# 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 talk about what makes a secure password and why they are important?

Can I protect my personal information when I do different things online?

Can I use the safety features of websites as well as reporting concerns to an adult?

Can I recognise websites and games appropriate for my age?

Can I make good choices about how long I spend online?

Can I ask an adult before downloading files and games from the internet?

Can I post positive comments online?

#### **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 break an open-ended problem up into smaller parts?

Can I put programming commands into a sequence to achieve a specific outcome?

Can I keep testing my program and can recognise when I need to debug it?

Can I use repeat commands?

Can I use a variety of tools to create a program?

Can I describe the algorithm I will need for a simple task?

Can I detect a problem in an algorithm which could result in unsuccessful programming?

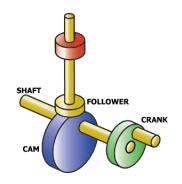
Handling Data	Pupils should be taught to select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
	Can I talk about the different ways data can be organised?
	Can I search a ready-made database to answer questions?
	Can I collect data to help me answer a question?
	Can I add to a database?
	Can I make a branching database?
	Can I use a data logger to monitor changes and can talk about the information collected?
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 create different effects with different technology tools?

Can I combine a mixture of text, graphics and

sound to share my ideas and learning?

	Can I use appropriate keyboard commands to amend text on my device, including making use of a spellchecker? Can I evaluate my work and improve its effectiveness? Can I use an appropriate tool to share my work online?
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 save and retrieve work on the internet, the school network or my own device?  Can I talk about the parts of a computer?  Can I tell you ways to communicate with others online?  Can I describe the World Wide Web as the part of the internet that contains websites?  Can I use search tools to find and use an appropriate website?  Can I think about whether I can use images that

I find online in my own work?



#### **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, develop and explain ideas for products to meet the needs of a specific audience?

Can I choose appropriate tools and techniques based on those shown?

Can I dissemble and investigate everyday products to see how they are fit for purpose?

	Can I communicate design ideas in different ways (e.g. verbally, written, in a labelled diagram) Can I plan what I am going to do next based on how my product is developing.
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 the appropriate tool to cut or join a range of materials?  Can I use tools and equipment to measure, mark out and shape materials and components?  Can I select an appropriate way to improve the appearance of my product?  Can I make gluing tabs?  Can I insert paper fasteners for card linkages?  Can I use a hack saw and bench

	Can I make simple paper models, 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 use my knowledge of common products, their characteristics and properties to support my work?
	Can I talk about how the changes I have made have improved by product?
	Can I identify the ways in which my product meets my design plan?
Electrical and Mechanical Components	Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
	Can I describe how a simple battery powered circuit can be controlled by different kinds of switches?

	ate simple circuits
	iting a battery, bulb,
switch an	, ,
Can I talk	about simple electrical
safety?	•
Can I expl	lore and describe how
an electric	c motor can be used in
a circuit?	
Can I use	a remote-controlled
device to off?	switch lights on and
Can I expl	lore and describe
	that can be used to
conduct e	electricity?
Can I expl	lore and explain how
the direct	tion and speed of an
electrical	motor can be
controlled	d?
Can I expl	lore and program a
simple co	ntrol device?
Food Technology Use the b	pasic principles of a
healthy a	nd varied diet to
prepare d	dishes?
Understar from?	nd where food comes
Can I talk	about what needs to be
done in o	rder to work safely and
hygienica	-
Can I use	simple tools eg, hand
whisk, rol	lling pins?

Can I sort and classify food according to specific food groups, eg, proteins, carbohydrates, fats etc?

Can I measure and weigh using standard units and scales?

Can I talk about the way in which food processing can affect the taste, appearance, texture and colour of food?

Can Lunderstand what makes a

Can I understand what makes a varied and healthy diet?

Can I talk about where the food I am cooking comes from?

### Mechanisms. Axles, Pulleys and Gears

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

Can I deconstruct and reconstruct sliders and levers?

Can I join levers to make linkages to create moving parts?

Can I vary the position of the pivot point to lift a load using a lever?

Can I construct a simple pneumatic system with one moving part?

Can I identify the cam within a simple mechanism and explain how movement is changed?  Can I construct boxes of different sizes from a net?  Can I attach a fixed axle to a chassis and add wheels ensuring that they can move freely?  Can I construct a pulley that allows a load to travel
horizontally along a rope?
Can I use construction kits with gears to mesh gears at right angles?
Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
Can I deconstruct and assemble the net of basic 3D shapes?
Can I measure and cut dowel accurately?
Can I use a range of materials to make simple joints, glue, tape and paper clips?
Can I make a rectangular frame from strip wood?
Can I strengthen 2D frames by
Can I strengthen 2D frames by adding diagonal bracing struts?
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	Can I cut and join fabrics using running stitch, buttons and bond web?  Can I decorate fabric by applying beads and sequins?
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#### **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).

Can I locate and name the countries making up the British Isles, with their capital cities?

Can I suggest reasons for the location of towns and settlements in a particular place?

For example, next to a river, on a hill top.

Can I locate and name the main

Can I locate and name the main counties and cities in/around the South West?

Can I compare two different regions in the United Kingdom (York and North Yorkshire) and discuss the geographical difference to Plymouth?

Can I locate and name the main counties and cities in England?

Can I compare land-use maps of the United Kingdom from the past with the present, focusing on land use and tourism impact?

#### **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.

Can I compare a region in the United Kingdom with a region in Europe?

#### **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

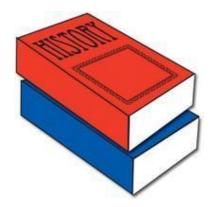
Can I describe and understand key aspects of human geography, including types of settlements and land use, economic activity including trade links and the distribution of natural resources including energy, food, minerals and water?

Can I describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts (link to work on the Rainforest)?

	Can I describe and understand key aspects of human geography, including: types of settlements in Viking, Saxon Britain?
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, 4-and 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 recognise that there are eight points of a compass?  Can I use two-figure grid references?

Can I show some understanding of basic symbols and the key (including the use of a simplified Ordnance Survey maps) to build knowledge of the United Kingdom and the wider world?

Can I use fieldwork to observe and record the human and physical features in the local area? For example, surveys, drawings and photographs.



# 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 4...

Can I use a range of information to ask and answer questions about the past?

Can I use interpretations, pictures and written sources to build a picture about the past?

Can I give reasons why peoples account of the same event may be different?

Can I talk about sources of information that contain negative views and accounts?

Can I ask and answer questions about an archaeological site?

Finding Out About the Past (Chronology)	Develop a chronologically secure knowledge and understanding of British, local and world history, establishing clear narratives within and across the periods they study?		
	Can I describe how the past has been divided into different periods of time?		
	Can I explain my reasons for placing objects, people and events in a particular order?		
	Can I use dates and historical terms to describe historical periods?		
	Can I use the terms BC and AD to locate dates of invasion and occupation?		
Historical Events	Can I describe features of past events and make links between them?		
	Can I describe features of historical events beyond living memory?		
	Can I identify common themes and features?		
	Can I compare similar events from the present and past?		
	Can I talk about the impact of events on the lives of the people of the time?		

Lifesty	les of	Peopl	le in	the	<b>Past</b>
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# Significant historical events, people and places in their own locality.

Can I compare and contrast the ways of life of people from different historical periods?

Can I compare and describe features of life now and in the past beyond living memory?

Can I describe and give reasons for the changes and differences in lifestyle in the past and present?

Can I compare and describe the characteristics of a range of significant groups from the past?

#### **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 a significant historical person from a historical period I am familiar with?

Can I identify and describe key events in their life from a range of sources of information?



#### **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 in order to answer questions?

Can I recall and repeat phrases?

Can I use familiar vocabulary to build basic sentences?

	Can I develop accurate
	pronunciation of words for
	familiar words or phrases?
	Can I present ideas and
	information orally?
	Can I use a dictionary to
	understand new words?
	Can I orally describe people 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 explore patterns and
	sounds of language through
	song/rhyme?
	Can I link patterns and sounds of
	language to spellings?
	Can I write describes about
	people 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 and respond to spoken language?
	Can I explore patterns and sound through songs and rhymes?
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 appreciate stories/ songs/ poems/rhymes in languages?



Singing	Pupils should be taught to use voices expressively and creatively by singing songs and speaking chants and rhymes.  Can I sing in tune with confidence, expression and control using a wider vocal range?
	Can I maintain an appropriate pulse?
Playing	Pupils should be taught to play tuned and untuned instruments musically.  Can I follow and lead simple performance directions, demonstrating understanding of these through playing?
Improvising and Composing	Pupils should be taught to experiment with, create, select and combine sounds using the inter-related dimensions of music.  Can I improvise melodic and rhythmic accompaniments to songs?  Can I compose music with a partner with a focus on a musical dimension?

Notation	Can I show shape of melody with
	hands when singing or
	performing?
	Can I follow pitch shape on a
	graphic score?
	Can I plan and explore sounds
	using symbols?
	Can I plot compositions on a
	graphic score?
Listening	Pupils should be taught to listen
	with concentration and
	understanding to range of high
	quality live and recorded music.
	Can I understand how sound is
	created on instruments heard?
History	Can I understand that there are
	different styles of music due to
	changes over time?



#### **Gymnastics**

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

By the end of Year 4???

Can I copy, remember, explore & repeat simple actions, and link & vary ideas with control & coordination?

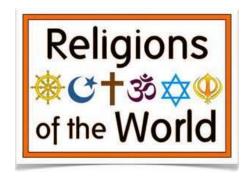
Can I apply compositional ideas to sequences alone & with others?

Can I describe my own & others work noting similarities & differences? Can I make suggestions for improvements?

I understand working safely, I recognise changes in my body and can give reasons why PE is good for health.

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 4???
	Can I improvise freely on my own & with a partner
	Can I translate ideas from a variety of stimuli into movement?
	Can I compare, develop & adapt movement & motifs to create longer dances? Can I use dance vocabulary to compare & improve my work?
	I understand working safely, I recognise changes in my body and Can I give reasons why PE is good for my health.
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?

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	By the end of Year 4???
	Can I begin to influence opposed
	conditioned game Can I control
	and catch a ball with movement?
	Can I accurately pass to someone
	else?
	Can I move with a ball (unihoc /
	football)?
	Can I talk about reasons for
	warming up / why exercise is
	good for health?
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 4???
	Can I run at a speed appropriate
	to the distance I am running?
	Can I take a running jump?
	Can I demonstrate a range of
	throwing actions using a variety
	of objects?
	Can I recognise a change in heart
	rate, temperature and breathing
	rate?
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<b>Knowing about</b>		
and understanding		
religions and world		
views		

Can I describe religions?

Can I describe world views?

Can I connect ideas about religion and world views?

Expressing and communicating ideas related to religions and worldviews

Can I give thoughtful responses using different forms of expression in RE?

Gaining and deploying the skills needed for studying religions and world views

Can I consider link and discuss questions?

Can I consider ideas?

Can I consider points of view?



Planning	Can I ask questions about the role of the different part of a plant?
Obtaining evidence Observation	Can I observe the different stages of plant life cycles over a period of time?
	Can I observe how water is transported in plants?
	Can I research different food groups and they keep up healthy?
	Can I observe rocks?
	Can I explore how rocks have changed over time?
	Can I research and discuss fossils?

	Can I look for patterns in what happens to shadows when the light source moves or the distance between the source and the object changes?  Can I observe that magnetic forces can act without direct contact?
Obtaining evidence Practical	Can I identify and group animals with and without skeletons?  Can I use a hand lens or
	microscope to identify and classify rocks?
	Can I explore similarities and differences in soils?
	Can I investigate what happens when rocks are rubbed together?
	Can I explore what happens when light reflects off a mirror or reflective surfaces?
	Can I explore the behaviour and everyday uses of different magnets?

	Can I carry out tests to find out how far things move on different surfaces?
Obtaining evidence Measurement	Can I look for and measure shadows?
Presenting evidence	Can I gather and record data to find answers to questions about magnets?
Considering and evaluating evidence	Can I observe and compare animal movements?
	Can I compare and contrast the diets of different animals?
	Can I compare the effect of different factors on plant growth?
	Can I how properties of magnets make them useful in everyday life?