Key Knowledge Skills and Expectations for Year 4 (2020-2021)

(Any statements highlighted in yellow are the knowledge we want this year group to remember going forward)

Red italic font is challenge

Science

Planning

- Set up a simple fair test to make comparisons.
- Plan a fair test and isolate variables, explaining why it was fair and which variables have been isolated.
- Suggest improvements and predictions.
- Decide which information needs to be collected and decide which is the best way for collecting it.
- Use their findings to draw a simple conclusion.

- *Plan and carry out an investigation by controlling variables fairly and accurately.*
- *Use test results to make further predictions and set up further comparative tests.*

Obtaining and presenting evidence

- *Take measurements using different equipment and units of measure* & record what they have found in a range of ways.
- *Make accurate measurements using standard units.*
- Present findings in different ways (display, presentation, writing).

Same as Y3

- *Record more complex data and results using scientific diagrams, classification keys, tables, bar charts, line graphs and models.*

Considering evidence and evaluating

- Find any patterns in their evidence or measurements.
- Make a prediction based on something they have found out.
- Evaluate what they have found using scientific language, drawings, labelled diagrams, bar charts and tables.
- Use straightforward scientific evidence to answer questions or to support their findings.
- Identify differences, similarities or changes related to simple scientific ideas or processes.
- *Report findings from investigations through written explanations and conclusions.*
- *Use a graph or diagram to answer scientific questions.*

Animals, including humans

- Identify and name the basic parts of the digestive system in humans.
- Describe the simple functions of the basic parts of the digestive system in humans.
- Identify the simple function of different types of teeth in humans.
- Compare the teeth of herbivores and carnivores.
- Explain what a simple food chain shows.
- Construct and interpret a variety of food chains, identifying producers, predators and prey.
- *Classify living things and non-living things by a number of characteristics that they have thought of.*
- *Explain how people, weather and the environment can affect living things.*
- *Explain how certain living things depend on one another to survive.*

Living Things and their Habitats

- Recognise that living things can be grouped in a variety of ways.
- Explore and use a classification key to group, identify and name a variety of living things. (plants, vertebrates, invertebrates)
- Compare the classification of common plants and animals to living things found in other places. (under the sea, prehistoric)
- Recognise that environments can change and this sometimes poses dangers to living things
- *Give reasons for how they have classified animals and plants, using their characteristics and how they are suited to their environment.*
- *Explore the work of pioneers in classification. (e.g. Carl Linnaeus)*
- *Name and group a variety of living things based on feeding patterns. (producer, consumer, predator, prey, herbivore, carnivore, omnivore)*

States of Matter

- Compare and group materials together, according to whether they are solids, liquids or gases.
- Explain what happens to materials when they are heated or cooled.
- Measure or research the temperature at which different materials change state in degrees Celsius.
- Use measurements to explain changes to the state of water.
- Identify the part that evaporation and condensation has in the water cycle.
- Associate the rate of evaporation with temperature.

up and classify a variety of materials according to the impact of temperature on them.
lain what happens over time to materials such as puddles on the playground or washing hanging on a line.
ıte temperature to change of state of materials.

Sound

- Describe a range of sounds and explain how they are made.
- Associate some sounds with something vibrating.
- Compare sources of sound and explain how the sounds differ.
- Explain how to change a sound (louder/softer).
- Recognise how vibrations from sound travel through a medium to the ear.
- Find patterns between the pitch of a sound and features of the object that produce it.
- Find patterns between volume of a sound & the strength of the vibrations that produced it.
- Recognise that sounds get fainter as the distance from the sound source increases.
- Explain how you could change the pitch of a sound.
- Investigate how different materials can affect the pitch and volume of sounds.
- *Explain why sound gets fainter or louder according to the distance.*
- *Explain how pitch and volume can be changed in a variety of ways.*
- *Work out which materials give the best insulation for sound.*

Electricity

- Identify common appliances that run on electricity.
- Construct a simple series electric circuit.
- Identify and name the basic part in a series circuit, including cells, wires, bulbs, switches and buzzers.
- Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery.
- Recognise that a switch opens and closes a circuit.
- Associate a switch opening with whether or not a lamp lights in a simple series circuit.
- Recognise some common conductors and insulators.
- Associate metals with being good conductors.
- *Explain how a bulb might get lighter.*
- *Recognise if all metals are conductors of electricity.*
- *Work out which metals can be used to connect across a gap in a circuit.*
- *Explain why cautions are necessary for working safely with electricity.*

History

Chronological understanding

- Plot recent history on a timeline using centuries.
- Place periods of history on a timeline showing periods of time.
- Use their mathematical skills to round up time differences into centuries and decades.

• Use their mathematical skills to help them work out the time differences between certain major events in history.

• Begin to build up a picture of what main events happened in Britain/ the world during different centuries.

Knowledge and interpretation

- Explain how past events have helped shape our lives.
- Appreciate that wars from a very long time ago are often associated with invasion, conquering or religious differences.
- Know that people who lived in the past cooked and travelled differently and used different weapons from ours.
- Recognise that the lives of wealthy people were very different from those of poor people.
- Appreciate how historic items are helping us to build up an accurate picture of how people lived in the past.

• Recognise that people's way of life in the past was dictated by the work they did.

• Appreciate that the food people ate was different because of the availability of different sources of food.

• Appreciate that weapons will have changed by the developments and inventions that would have occurred within a given time period.

• Appreciate that wealthy people would have had a very different way of living which would have impacted upon their health and education.

Historical enquiry

- Research two versions of an event and say how they differ.
- Research what it was like for a child in a given period from the past and use photographs and illustrations to present their findings.
- Give more than one reason to support an historical argument.
- Communicate knowledge and understanding orally and in writing and offer points of view based upon what they have found out.

• Independently, or as part of a group, present an aspect they have researched about a given period of history using multi-media skills when doing so.

Geography

Geographical Enquiry

- Carry out a survey to discover features of cities and villages.
- Find the same place on a globe and in an atlas.
- Label the same features on an aerial photograph as on a map.
- Plan a journey to a place in England using a road map.
- Accurately measure and collect information (e.g. rainfall, temperature, wind speed, noise levels etc.)

• Give accurate measurements between 2 given places within the UK.

Physical Geography

- Describe the main features of a well-known city.
- Describe the main features of a village.
- Describe the main physical differences between cities and villages.
- Use appropriate symbols to represent different physical features on a map.
- Know & label the main features of a river.
- Know the name of & locate a number of the world's longest rivers.
- Know the names of a number of the world's highest mountains.
- Explain the features of a water cycle.
- Know why most cities are located by a river

• Explain how a locality has changed over time with reference to physical features.

Human Geography

- Explain why people are attracted to live in cities.
- Explain why people may choose to live in a village rather than a city.
- Explain how a locality has changed over time with reference to human features.
- Find different views about an environmental issue. What is their view?
- Suggest different ways that a locality could be changed and improved.

• Explain how people are trying to manage their environment.

Geographical Knowledge

- Locate the Equator, the Tropic of Cancer & Capricorn & the Greenwich Meridian on maps or globes.
- Know difference between British Isles, GB & UK.
- Know the countries that make up the European Union. Know a number of European capitals.
- Name up to 6 major cities in the UK and 8 across the world and locate them on a map.
- Locate and name some of the main islands that surround the UK.
- Know where the main mountain regions are in the UK
- Know, name and locate the main rivers in the UK.
- Name the areas of origin of the main ethnic groups in the UK & in their school.

• Name the counties that make up the home counties of London.

• Name some of the main towns and cities in Yorkshire and Lancashire.

Computing

Algorithms and Programs

- Use repeat instructions to draw regular shapes on screen, using commands.
- Experiment with variables to control models.
- Make turns specifying the degrees.
- Give an on-screen robot specific directional instructions that takes them from x to y.
- Make accurate predictions about the outcome of a program they have written.

Data Retrieving and Organising

- Capture images using webcams, screen capture, scanning, visualiser and internet.
- Choose images and download into a file.
- Download images from the camera into files on the computer.
- Copy graphics from a range of sources and paste into a desktop publishing program.

Communicating

- Appreciate the benefits of ICT to send messages and to communicate.
- Use the automatic spell checker to edit spellings.

Using the Internet

- Use a search engine to find a specific website.
- Use note-taking skills to decide which text to copy and paste into a document.
- Use tabbed browsing to open two or more web pages at the same time.
- Open a link to a new window.
- Open a document (PDF) and view it.
- *Use photo editing software to crop photographs and add effects.*
- *Copy and paste the graph/barchart and use it in a WP document.*
- *Use animation in their presentation.*

Databases

- Input data into a prepared database.
- Sort and search a database to answer simple questions.
- Recognise what a spread sheet is.
- Use the terms ‘cells’, ‘rows’ and ‘columns’.
- Enter data, highlight it and make bar charts.

Presentation

- Create a lengthy presentation that moves from slide to slide and is aimed at a specific audience.
- Insert sound recordings into a multi-media presentation.
- Know how to manipulate text, underline text, centre text, change font and size and save text to a folder.
- Produce and upload a podcast

E Safety Knowledge & Understanding

• Understand the need for rules to keep them safe when exchanging learning & ideas online.
• Recognise that information on the internet may not be accurate or reliable and may be used for bias, manipulation or persuasion.
• Understand that the internet contains fact, fiction and opinion and begin to distinguish between them.
• Use strategies to verify information, e.g. cross-checking.
• Understand the need for caution when using an internet search for images and what to do if they find an unsuitable image.
• Understand that copyright exists on most digital images, video and recorded music.
• Understand the need to keep personal information and passwords private.
• Understand that if they make personal information available online it may be seen and used by others.
• Know how to respond if asked for personal information or feel unsafe about content of a message.
• Recognise that cyber bullying is unacceptable and will be sanctioned in line with the school's policy.
• Know how to report an incident of cyber bullying.
• Know the difference between online communication tools used in school and those used at home.
• Understand the need to develop an alias for some public online use.
• Understand that the outcome of internet searches at home may be different than at school.

E Safety Skills

• Follow the school's safer internet rules.
• Recognise the difference between the work of others which has been copied (plagiarism) and re-structuring and re-presenting materials in ways which are unique and new.
• Begin to identify when emails should not be opened and when an attachment may not be safe.
• Explain how to use email safely.
• Use different search engines.

Recognise acceptable and unacceptable behaviour using technology

Art

Drawing

• Begin to show facial expressions and body language in their sketches.
• Identify and draw simple objects, and use marks and lines to produce texture.
• Organise line, tone, shape and colour to represent figures and forms in movement.
• Show reflections.
• Explain why they have chosen specific materials to draw with.

Painting

• Create all the colours they need.
• Create mood in their paintings.
• Successfully use shading to create mood and feeling.

Printing

• Create an accurate print design.
• Print onto different materials, using at least four colours.
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Sketch books

• Use sketch books to express feelings about various subjects and outline likes and dislikes.
• Produce a montage all about themselves. Create facial expressions
• Use sketch books to adapt and improve original ideas.
• Keep notes about the purpose of their work in their sketch books.
● Use photos to help create reflections.

3D/ Textiles

• Experiment with and combine materials and processes to design and make 3D form.
• Begin to sculpt clay & other mouldable materials.
• Use early textile and sewing skills as part of a project.

Collage

• Use ceramic mosaic.
• Combine visual and tactile qualities.

Use of IT

• Present a collection of work on a slide show.
• Create pieces of art work which include the integration of digital images they've taken.
• Combine graphics and text based on research.

Knowledge

• Experiment with different styles which artists have used.
• Explain art from other periods of history.
● Know how different artists developed their specific techniques

Design Technology

Developing, planning and communicating ideas

- Come up with at least one idea about how to create their product and communicate idea in a range of ways, e,g annotated drawings and sketches.
- Take account of the ideas of others when designing.
- Produce a plan and explain it to others.
- Suggest some improvements and say what was good and not so good about their original design.

Working with tools, equipment, materials and components to make quality products

- Tell if their finished product is going to be good quality.
- Be conscience of the need to produce something that will be liked by others.
- Show a good level of expertise when choosing and using a range of tools and equipment.
- Know which material is likely to give the best outcome.
- Work at their product even though their original idea might not have worked.

Evaluating processes and products

- Think of how they will check if their design is successful.
- Begin to explain how they can improve their original design.
- Evaluate their product, thinking of both appearance and the way it works.
- Take time to consider how they could have made their idea better.

Breadth of study

Cooking and nutrition

- Know what to do to be hygienic and safe.
- Think what they can do to present their product in an interesting and creative way.

Textiles

- Think what the user would want when choosing textiles.
- Think about how to make a product strong.
- Devise a template.
- Explain how to join things in a different way.

Electrical and mechanical components

- Add things to circuits, e.g switches & buzzers.
- Use electrical systems to enhance the quality of the product.
- Alter product after checking
- Be confident about trying out new and different ideas.
- Use IT where appropriate to add to the quality of the product.

Stiff and flexible sheet materials

- Measure carefully so as to make sure there are no mistakes.
- Attempt to make products strong.

Mouldable materials

- Use a range of advanced techniques to shape and mould.
- Use finishing techniques, showing an awareness of audience.

Music

Performing

- Perform a simple part rhythmically.
- Sing songs from memory with accurate pitch.
- Improvise using repeated patterns.

- *Use selected pitches simultaneously to produce simple harmony.*

Composing *(incl notation)*

- Use notations to record and interpret sequences of pitches.
- Use standard notation.
- Use notations to record compositions in a small group or on their own.
- Use their notation in a performance.

- *Explore and use sets of pitches, e.g. 4 or 5 note scales.*
- *Show how they can use dynamics to provide contrast.*

Appraising

- Explain the place of silence and say what effect it has.
- Start to identify the character of a piece of music.
- Describe and identify the different purposes of music.
- Begin to identify with the style of work of Beethoven, Mozart and Elgar.

- *Identify how a change in timbre can change the effect of a piece of music.*

PE & Dance

Acquiring and developing skills

- Select and use the most appropriate skills, actions or ideas.
- Move and use actions with co-ordination and control.
- Make up their own small-sided game.

Evaluating and improving

- Explain how their work is similar and different from that of others. Listen to the ideas of others.
- Use their comparison to improve their work.

Health and fitness

- Explain why warming up is important.
- Explain why keeping fit is good for their health.

Dance

- Take the lead when working with a partner or group.
- Use dance to communicate an idea.
- Work on their movements and refine them.
- Ensure their dance is clear and fluent.

Competitive Games

- Catch with one hand.
- Throw and catch accurately.
- Hit a ball accurately and with control.
- Keep possession of the ball.
- Move to find a space when they are not in possession during a game.
- Vary tactics and adapt skills according to what is happening in a game.

Gymnastics

- Work in a controlled way.
- Include change of speed & direction in a sequence.
- Include range of shapes.
- Follow a set of 'rules' to produce a sequence.
- Work with a partner to create, repeat and improve a sequence with at least three phases.

Athletics

- Show stamina when running over a long distance.
- Sprint over a short distance.
- Throw in different ways.
- Hit a target.
- Jump in different ways.

Outdoor/adventurous

- Follow a map in a more demanding familiar context.
- Move from one location to another following a map.
- Use clues to follow a route.
- Follow a route accurately, safely and within a time limit.

Dance

- *Structure and vary longer dances.*
- *Develop movement ideas for others.*
- *Show a good sense of rhythm and style when performing.*
- *Remember and perform a range of warm-up and cool-down activities.*
- *Give reasons why physical activity is good for health.*
- *Use a range of dance vocabulary to describe, interpret and evaluate dance.*

MFL

Examples and Signposting in Red

Listening and responding	Speaking	Reading and responding	Writing
• Understand short passages made up of familiar language? • Understand instructions, messages and dialogues within short passages? • Identify and note the main points and give a personal response on a passage?	• Have a short conversation where they are saying 2-3 things? • Use short phrases to give a personal response?	• Read and understand short texts using familiar language? ● Identify and note the main points and give a personal response? Listen to French stories on You Tube: e.g. Le loup qui voulait changer de couleur ● Read independently? • Use a bilingual dictionary or glossary to look up new words?	• Write 2-3 short sentences on <a familiar topic>? • Say what they like and dislike about <a familiar topic>?
Spoken at near normal speed with no interference. May need short sections repeated.	*Although they use mainly memorised language, they occasionally substitute items of vocabulary to vary the questions or statements.*		*They write short phrases from memory and their spelling is readily understandable.*

Year 4 Language Coverage

Each lesson will contain the following elements which will build on the language and knowledge taught in previous lessons. The parts in bold text in the ongoing section will be additional knowledge.

- ***Greetings - How are you? Name and Age & Birthday. Where do you live? – (Role Play)***
- ***Family members – (Role Play)***
- ***Numbers (1-69) – (Games e.g. 'Lotto')***
- ***Classroom Language, Instructions, Colours & Body Parts – (Game 'Simon Dit' – use of imperatives)***
- ***Days of the week and months of the year – (On wb everyday) Writing the date – (Any written work)***

Autumn, Term 1 (All Around Town)

- ***Shops in the town***
- ***Directions – Ou est le supermarche?***

Autumn, Term 2 (Going Shopping)

- ***Clothes shopping – je porte, il/elle porte un pantalon, une jupe etc***
- ***French song: e.g. Loup y es –tu? (Wolf, where are you?) Helps with clothes vocab***
- ***Christmas – (Short Plays, Assemblies, Christmas Carols)***

Spring, Term 1 (Holidays, Sports & Hobbies)

- ***Sports and hobbies – Quel est ton sport prefere? Je prefere le rugby etc***
- ***Family (Masculine and Feminine) Mon frere …., ma soeur etc***
- ***Pets (Masculine and Feminine) Mon chien ….., ma souris etc***

Spring, Term 2 (On the Move)

- ***Types of transport, e.g. le train. Link to adjectives, e.g. colour and size – le train bleu***
- ***Easter***

Summer, Term 1 (What's the Time?)

- ***Analogue, digital and 24 hours***

Summer, Term 2 (French Culture Coverage)

- ***Food***
- ***School***
- ***Famous People***
- ***Landmarks***
- ***Events for 2020 – 2021 – Tour de France, Bastille Day, UEFA Euro, Tokyo Olympics***

Websites:-
Euroclubschools
SALUT
frenchgames.net
digitaldialects.com
hello-world.com
topmarks.co.uk
crickweb.co.uk