








Outlined below is the 'sticky' knowledge for Year 4. We expect children to know and remember the following information, which is derived from our broader curriculum expectations. These concepts are revisited in our regular focused retrieval sessions – as well as through lessons, where prior knowledge is identified, built upon and extended. Number in brackets is amount of knowledge points expected per unit.


| Science | Animals including Humans | Living things and their habitats | States of Matter | Electricity | Sound |
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|  | <p>The digestive system includes the mouth, oesophagus, stomach, small intestine, large intestine, and anus.</p> <p>The mouth breaks down food, the oesophagus moves food to the stomach, the stomach digests food, the small intestine absorbs nutrients, the large intestine absorbs water, and the anus removes waste.</p> <p>Human teeth include incisors, canines, premolars and molars.</p> <p>The parts of a food chain are producers (plants), primary consumers (herbivores), secondary consumers (carnivores), and decomposers (fungi and bacteria).</p> <p>A food chain starts with a plant, then a herbivore eats the plant, and a carnivore eats the herbivore.</p> | <p>A key helps classify things into different groups.</p> <p>Vertebrates have a backbone, while invertebrates do not.</p> <p>Observing the leaves, shape, and size of trees/plants can help classify them.</p> <p>Humans affect the environment positively by planting trees and recycling, and negatively by polluting and deforestation.</p> | <p>Materials can be compared and grouped together according to whether they are solids, liquids or gases.</p> <p>Some materials change state when they are heated or cooled.</p> <p>Evaporation and condensation are parts of the water cycle.</p> <p>Rate of evaporation is associated with temperature.</p> | <p>Many common appliances run on electricity.</p> <p>A simple circuit can be made using cells, wires, bulbs, switches and buzzers.</p> <p>A lamp will only light in a simple circuit if it is part of a complete loop with a battery.</p> <p>A switch opens and closes a circuit.</p> <p>Conductors, conduct electricity but insulators don't.</p> <p>Metals are good conductors.</p> | <p>Sounds travel through vibrations in the air, water, or solid objects.</p> <p>The pitch of a sound can be changed by tightening or loosening a string, or changing the size of an instrument.</p> <p>The volume of a sound changes by increasing or decreasing the force of vibration or by moving closer or farther from the sound source.</p> <p>Sounds become quieter as they travel further away.</p> <p>Materials like foam, carpet, and curtains are good for absorbing sound because they trap vibrations.</p> |


| History | Romans | Vikings | Ancient Egypt |
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|  | <p>The Ancient Roman civilisation began in 753BC when the city of Rome was founded.</p> <p>The Roman Empire expanded through military conquests, strong leadership, and building roads and cities.</p> <p>Boudicca was a British queen who led a revolt against Roman rule.</p> <p>The Romans improved life in Britain with roads, baths, aqueducts, and central heating.</p> <p>Before the Romans successfully invaded Britain in 43 AD, the land was inhabited by Iron Age people, known as the Celts.</p> <p>The Romans' impact on life today includes roads, architecture, laws, and the calendar.</p> <p>Britain had lots of goods, land and slaves, which the Romans wanted.</p> | <p>Tom Leonard was a journalist and photographer from Charltons, near Loftus, who documented the ironstone mining heritage of Cleveland, preserving its history through photographs and memorabilia.</p> <p>The local mine in Loftus, known as Loftus Mine or Skinningrove Mine, opened in 1848 and closed in 1958.</p> <p>The Industrial Revolution increased demand for ironstone to produce steel, which was essential for railways, ships, and construction, profoundly shaping the region's industry.</p> <p>Railways were vital for transporting ironstone from the mines to nearby steelworks and ports, enabling rapid industrial growth and supporting local economies.</p> | <p>The Ancient Egyptian period began around 3100 BC.</p> <p>Tutankhamun was a young pharaoh whose intact tomb was found, revealing much about Ancient Egyptian life.</p> <p>Mummification involved removing organs, drying the body with natron, wrapping it in linen, and placing it in a tomb.</p> <p>Howard Carter discovered Tutankhamun's tomb in 1922.</p> <p>Ancient Egyptians wrote using hieroglyphics carved on walls or written on papyrus.</p> |

| Geography | Locational Knowledge | Place | Human and physical geography | Geographical skills and fieldwork |
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|  | <p>Eight European countries are France, Germany, Italy, Spain, Portugal, Greece, Sweden, and Norway.</p> <p>Five capital cities of neighbouring European countries are Paris (France), Berlin (Germany), Rome (Italy), Madrid (Spain), and Lisbon (Portugal).</p> <p>Six cities in the UK are London, Manchester, Birmingham, Edinburgh, Cardiff, and Belfast.</p> <p>Globes are round models of the Earth, while maps are flat drawings of places.</p> <p>Longitude lines run up and down; latitude lines run side to side, helping us find places.</p> <p>Time zones are different parts of the world with different times. For example, the UK is one hour behind France.</p> | <p>Places may change in the future - such as the construction of new buildings or the impact of climate change.</p> <p>Differences between the UK and a Mediterranean country are the UK is cooler, Mediterranean countries are sunnier, they eat more seafood, the UK has more rain, and Mediterranean homes often have flat roofs.</p> <p>Their local area might have been a farming community in the past, but now it has more houses, shops, and roads due to urbanization.</p> <p>The Amazon rainforest and the Amazon River can be located using an atlas or globe, with the Amazon River flowing through South America, primarily in Brazil.</p> | <p>The largest river in the UK is the River Severn. The largest river in the world is the Amazon River.</p> <p>The water cycle includes evaporation, condensation, precipitation, and collection.</p> <p>The main features of a river include the source, mouth, tributaries, and riverbank.</p> <p>Rivers can change over time due to erosion/deposition.</p> <p>Symbols are used on maps to represent physical features like rivers, mountains, and forests.</p> | <p>Information about a place can be collected and organised into a report.</p> <p>Graphs can be used to record data, such as temperature or rainfall, from various locations.</p> <p>Geographical questions about a place can be posed and answered using fieldwork observations.</p> <p>Detailed sketches and plans can be made and refined for accuracy.</p> <p>A journey within the UK can be planned using a road map, and a simple itinerary can be created.</p> |

| PSHE | Being me in my world | Celebrating Differences | Dreams and Goals | Healthy me | Relationships | Changing me |
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|  | <p>I understand how my actions and voice help others, how our school works and how working together and democracy make the school community better for everyone.</p> | <p>I understand stereotypes, hidden bullying, why people react differently, and I value my uniqueness and changing first impressions</p> | <p>I can set goals, cope with disappointment, reflect positively, work well in a group, and make new plans when things don't go as hoped.</p> | <p>I understand group roles and friendships, know my values, and understand the health effects and reasons behind smoking and drinking alcohol.</p> | <p>I understand relationships, including jealousy, friendship changes, love and appreciation, and know that romantic relationships are for later in life, as well as reflecting on people I no longer see.</p> | <p>I understand how I have been influenced by my parents and life experiences, know the basics of human reproduction and body changes, understand parenthood, and can recognise and manage changes in my life, including moving to a new class.</p> |


| Art and Design (knowledge of art and artists) | Drawing | Painting | Sculpture |
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|  | <p>Complementary colours are opposite the colour wheel.</p> <p>Tones are blended with little visual appearance of intervals (pencil, pastel)</p> <p>identify a wider range of different moods associated with colour (other than warm and cool) – e.g., vibrant, calm, love, relaxed, fiery, angry, powerful, moody and sad.</p> <p>Scale is a comparison of size between objects</p> | <p>There is a difference between shades, tints, and tones:</p> <p>Shade: Shade is a hue or mixture of pure colours to which only black is added.</p> <p>Tint: Tint is a mixture of pure colours to which white is added.</p> <p>Tone is a mixture of pure colours to which only pure grey is added</p> <p>Different paint types have different properties (e.g., the varying consistency and glossiness of watercolour and poster paint).</p> <p>Pointillism is dashes and dots used to create texture, dynamism and visual interest</p> | <p>Rolling out 3D shapes and form them into an object required flat slabs, created with a rolling pin, raised with two pieces of wood.</p> <p>The clay can be decorated by imprinting or through relief techniques.</p> <p>Joining should be seamless by using 'slip'.</p> |


| Design Technology | Structures | Food Technology: Culture and Seasonality | Mindful Moments timer |
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|  | <p>A frame structure is a type of structure made from a framework of connected parts.</p> <p>A 'free-standing' structure can stand on its own without support.</p> <p>A pavilion is a decorative building or structure for leisure activities.</p> <p>Cladding is applied to structures for different effects.</p> <p>Aesthetics refers to how a product looks.</p> | <p>The amount of an ingredient in a recipe is known as the 'quantity'.</p> <p>Safety and hygiene are important when cooking.</p> <p>The following cooking techniques are used: sieving, measuring, mixing/stirring, cutting out, and shaping.</p> <p>Budgeting is important when planning ingredients for a recipe.</p> <p>Products often have a target audience.</p> | <p>Variables are used in programming to store and manipulate data.</p> <p>Some of the features of a micro: bit include buttons, a display, and sensors.</p> <p>Aesthetics is how something looks and feels.</p> <p>It is important to check code for errors (bugs) to ensure it works correctly.</p> <p>A prototype is a 3D model made of cheap materials that allows us to test design ideas and make better decisions about size, shape, and materials.</p> |

| RE (3) | Buddhism | Christianity | Buddhism | Christianity | Buddhism | Christianity |
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|  | <p>Buddhism began when Siddhartha Gautama became the Buddha in India long ago.</p> | <p>A symbol is something that stands for an idea or belief.</p> | <p>The Buddha's story includes his search for enlightenment and teaching the Four Noble Truths.</p> | <p>Jesus was a teacher who had enemies because his teachings challenged leaders.</p> | <p>The Noble Eightfold Path includes Right Understanding, Right Intention, Right Speech, Right Action, Right Livelihood, Right Effort, Right Mindfulness, and Right Concentration.</p> | <p>Special places are linked to religions (e.g. churches for Christians).</p> <p>Places of worship (churches, mosques, etc.) have similarities and differences.</p> |

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| <p>He left his rich life to look for understanding and peace.</p> <p>He taught about suffering and how to overcome it.</p> <p>His main teachings are the Four Noble Truths and the Eightfold Path.</p> <p>The Buddha taught that being kind and helping others brings happiness.</p> <p>Wanting too much money can make happiness harder.</p> <p>The Eightfold Path shows how to live kindly, wisely, and mindfully</p> | <p>Christmas has religious symbols (nativity scene, star, angel) and popular ones (tree, Santa).</p> <p>The star shows guidance, the manger shows humility, and the angel brings good news. The star guided the wise men to Jesus. The manger shows Jesus was born simply. The cross is a symbol of Jesus' sacrifice. The fish is an early Christian sign. The angel shares a message of peace and joy.</p> <p>Incarnation means Christians believe God became human as Jesus.</p> <p>For Christians, the birth of Jesus is the most important part of Christmas</p> | <p>Siddhartha's truths are that everything changes, and people struggle with it, and that suffering is caused by selfishness and desire.</p> <p>The Buddha taught that being less selfish and greedy would create a better world with kindness and understanding.</p> <p>Right speech and the other steps of the Eightfold Path help create a positive impact by promoting truthfulness and mindfulness.</p> | <p>Jesus forgave those who let him down, including his disciples.</p> <p>Bible verses like the Lord's Prayer show that Christians believe in forgiveness.</p> <p>Christians believe Jesus' death offers forgiveness for their sins.</p> <p>Christians believe forgiveness is important, following Jesus' example.</p> | <p>The Buddha taught the Eightfold Path to help people live a balanced and ethical life, leading to the end of suffering and achieving enlightenment.</p> <p>The Eightfold Path teaches that living mindfully and with good intentions can improve our lives and the world around us.</p> | <p>Christians are people who worship in churches.</p> <p>Not all Christians go to church regularly.</p> <p>John the Baptist baptized Jesus and helped spread his message.</p> <p>The Eucharist (holy communion) often involves eating bread and drinking wine.</p> <p>People worship in different ways, such as singing, praying, or reading scriptures. People respond to worship in different ways.</p> <p>Christians try to live kindly, honestly, and lovingly, following Jesus' teaching</p> |
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|  | Privacy and Security | Online Relationships | Health, Wellbeing and Lifestyle | Online Bullying |
| | <p>I can describe strategies for keeping personal information private, depending on context.</p> <p>I can explain that internet use is never fully private and is monitored, e.g. adult supervision.</p> <p>I can describe how some online services may seek consent to store information about me; I know how to respond appropriately and who I can ask if I am not sure.</p> <p>I know what the digital age of consent is and the impact this has on online services asking for consent.</p> | <p>I can describe strategies for safe and fun experiences in a range of online social environments (e.g. livestreaming, gaming platforms)</p> <p>I can give examples of how to be respectful to others online and describe how to recognise healthy and unhealthy online behaviours.</p> | <p>I can explain how using technology can be a distraction from other things, in both a positive and negative way.</p> <p>I can identify times or situations when someone may need to limit the amount of time they use technology e.g. I can suggest strategies to help with limiting this time.</p> | <p>I can recognise when someone is upset, hurt or angry online.</p> <p>I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat).</p> <p>I can explain why people need to think carefully about how content they post might affect others, their feelings and how it may affect how others feel about them (their reputation).</p> |
| | Online Reputation | Managing Online Information | Self-image and identity | Copyright and Ownership |
| | <p>I can explain how content shared online may feel unimportant to one person but may be important to other people's thoughts feelings and beliefs.</p> <p>I can describe how to find out information about others by searching online.</p> <p>I can explain ways that some of the information about anyone online could have been created, copied or shared by others.</p> | <p>I can analyse information to make a judgement about probable accuracy and I understand why it is important to make my own decisions regarding content and that my decisions are respected by others.</p> <p>I can describe how to search for information within a wide group of technologies and make a judgement about the probable accuracy (e.g. social media, image sites, video sites).</p> <p>I can describe some of the methods used to encourage people to buy things online (e.g. advertising offers; in-app purchases, pop-ups) and can recognise some of these when they appear online.</p> <p>I can explain why lots of people sharing the same opinions or beliefs online do not make those opinions or beliefs true.</p> <p>I can explain that technology can be designed to act like or impersonate living things (e.g. bots) and describe what the benefits and the risks might be.</p> <p>I can explain what is meant by fake news e.g. why some people will create stories or alter photographs and put them online to pretend something is true when it isn't.</p> | <p>I can explain how my online identity can be different to my offline identity.</p> <p>I can describe positive ways for someone to interact with others online and understand how this will positively impact on how others perceive them.</p> <p>I can explain that others online can pretend to be someone else, including my friends, and can suggest reasons why they might do this.</p> | <p>When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it.</p> <p>I can give some simple examples of content which I must not use without permission from the owner, e.g. videos, music, images.</p> |

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|  | General Skills | Publishing (Pages) | Presentation (Keynote) | Filmmaking (iMovie) |
| | <p>Show me how to add notes to texts in iBooks.</p> <p>Tell me how to use screen recording to demonstrate an idea as a movie.</p> <p>Show me how to use Stop Motion for simple 2D animation.</p> <p>Tell me how to retrieve information effectively in Safari.</p> <p>Show me how to identify images and text online that you can use in your own work, respecting copyright.</p> <p>Tell me how to create a stop motion to illustrate a scene.</p> | <p>Show me how to use the 'Remove Background' feature.</p> <p>Show me how to layer objects in a project.</p> <p>Tell me how to use assets from other apps within a document.</p> <p>Tell me how to create a poster.</p> <p>Show me how to create a flyer to promote a key event.</p> | <p>Show me how to use 'Remove Background' effectively on a page layout.</p> <p>Show me how to layer objects in a project.</p> <p>Tell me how to animate objects using clicks and timings.</p> <p>Show me how to create transitions using clicks and timings.</p> <p>Show me how to create a short presentation to demonstrate what you have learned.</p> | <p>Show me how to add titles to a movie.</p> <p>Show me how to alter transitions in a movie.</p> <p>Tell me how to alter the speed of clips for a specific audience effect.</p> <p>Show me how to use the green screen function for effect.</p> <p>Tell me how to produce a short film report live</p> <p>Show me how to create a short travelogue.</p> |
| | Sound production (Garageband) | Coding (Scratch) | Data Handling (Numbers) | Social Media |
| | <p>Show me how to create a voice recording with a layered underscore.</p> <p>Tell me how to create a soundtrack to add tone and mood to the performance.</p> <p>Show me how to produce a piece of music to illustrate the tone of a passage.</p> | <p>Show me how to animate a character.</p> <p>Tell me how to create a story using animation.</p> <p>Show me how to create a short animation to illustrate a key series of events in history.</p> <p>Tell me how to tell the story of the water cycle using images created in Pages as backgrounds and a sprite as the lead character.</p> | <p>Show me how to collect data in a Numbers document and display it as a chart.</p> <p>Show me how to use a range of data collection techniques, such as numerical, rating, and checklist.</p> <p>Tell me how to present the results of a science experiment in table and graph format</p> <p>Show me how to present the differences in climate for a place of study and the children's hometown.</p> | <p>Show me how to use soundtracks/music to improve a presentation.</p> <p>Tell me how to use live titles for effect in a presentation.</p> <p>Show me how to use scenes to create a narrative or effect.</p> <p>Show me how create a social media-style YouTube-style presentation in a short and snappy way.</p> |

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| French | Seasons | Fruits | All about me | My Family | Classroom objects | In the cafe |
| | <p>The four seasons in French are le printemps, l'été, l'automne, and l'hiver.</p> <p>The term for "favourite season" in French is "saison préférée."</p> <p>The conjunctions "et" (and) and "car" (because) are used to connect ideas in French.</p> <p>A reason for a favourite season can be expressed in French using simple vocabulary.</p> | <p>The ten fruits in French are la pomme, la banane, l'orange, la fraise, la cerise, le raisin, le melon, l'ananas, la poire, and la pêche.</p> <p>Some fruits can be spelled from memory with reasonable accuracy.</p> <p>The question "Tu aimes ___ ?" can be used to ask if someone likes a fruit.</p> <p>The phrases "J'aime ___" (I like ___) and "Je n'aime pas ___" (I don't like ___) are used to express likes and dislikes.</p> | <p>Simple set phrases to talk about oneself in French include "Je m'appelle [name]" (My name is [name]).</p> <p>Numbers 1-10 in French, like "un, deux, trois," are understood, and counting to nearly 20 is possible.</p> <p>The nationality can be stated in French, such as "Je suis anglais" (I am English), with an understanding of pronunciation differences for gender.</p> <p>Set phrases like "Quel âge as-tu ?" (How old are you?) can be used to ask for simple information in French.</p> <p>The nationality can be explained, with the knowledge that pronunciation changes for boys and girls, e.g., "Je suis anglais" (for a boy) and "Je suis anglaise" (for a girl).</p> | <p>The basic language for presenting oneself in French includes phrases like "Je m'appelle [name]" and "J'ai [age] ans."</p> <p>Family members in French are referred to with words like "mon frère" (my brother), "ma sœur" (my sister), and others.</p> <p>Numbers 1-70 in French are understood and used to express age.</p> <p>The phrase "Il/Elle a [age] ans" is used to say how old a family member is.</p> | <p>The 12 classroom objects in French, such as "un crayon" (a pencil) and "une gomme" (an eraser), are known with their correct article/determiner.</p> <p>The words for "a" and "my" are used correctly before classroom objects, with examples provided for reference.</p> <p>The correct indefinite article/determiner (e.g., "un" for masculine and "une" for feminine objects) is applied to the classroom objects.</p> <p>The ability to recall and state in French what is and isn't in the pencil case is developed, both in spoken and written form.</p> | <p>Items typically offered in a French salon de thé, such as "un croissant" (a croissant) or "une tasse" (a cup), are known with their correct article/determiner.</p> <p>Singular nouns can be changed to plural nouns in French with guidance and examples, such as "un croissant" to "des croissants."</p> <p>Common phrases for asking for food and drink in a French salon de thé, like "Je voudrais un croissant" (I would like a croissant) and "Je voudrais un thé" (I would like a tea), are understood.</p> <p>Plural forms of nouns in French, such as "des croissants" (some croissants), can be used with confidence.</p> <p>The ability to confidently ask for food and drink in a French salon de thé is developed, using correct vocabulary and sentence structure.</p> |

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| PE | Invasion Games (Football, Lacrosse Tag Rugby Handball) | Dance | Striking and Fielding (Rounders and Cricket) | Athletics |
| | OA | Gymnastics | Net Wall Games Tennis | |

Retrieval Practise Sessions:

At Handale, we understand that regular retrieval practice embeds learning in to the long term memory – and as such, we aim to regularly retrieve prior learning through fun, low stakes retrieval opportunities.

If a teacher assesses that a concept or word is not well embedded, they must ascertain how this will be improved?

- Embedded into a curriculum lesson
- Taught there and then – as part of the retrieval session
- Embedded into the next few sessions to gain repeated exposure of the concept to aid overlearning

Over the year, with regular retrieval practice sessions, as well as revisit opportunities built into the curriculum, it is hoped that the vast majority of children will have the above knowledge firmly embedded in to their long term memory.