



Planning for retention
Key of Knowledge | Year 5



Outlined below is the 'sticky' knowledge for Year 5. 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	Living things and Life Cycles	Properties and Changes of Materials	Forces	Earth and Space
	- The changes which take place as humans develop from babies to old age, including changes which happen during puberty. - The life cycles of a mammal, an amphibian, an insect and a bird are different. - Reproduction is a life process. - Plants and animals reproduce in similar/different ways.	- Materials can be grouped according to properties including hardness, solubility, transparency, conductivity and magnetism. - Some materials dissolve in liquid to form a solution. - A substance can be recovered from a solution. - Mixtures can be separated through filtering, sieving and evaporating. - Comparative and fair tests can be used to evidence why a particular material is used for a purpose. - Dissolving, mixing and changes of state can be reversible changes. - Some changes result in the formation of new materials and this kind of change is usually irreversible.	- Unsupported objects fall towards the earth because of the force of gravity acting between the earth and the falling object. - Air resistance, water resistance and friction are all effects that act between moving surfaces. - Some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect.	- The sun, moon and earth are approximately spherical bodies. - Mercury, venus, earth, mars, Jupiter Saturn and Uranus are planets in order of their distance from the sun. - The sun appears to move across the sky and the moon has phases. - As the earth and planets rotate they also orbit the sun. - The earth experiences day and night because it rotates.

History	Anglo Saxons	Vikings		
	- Anglo-Saxons (and Scots) The Anglo-Saxons raided Roman Britain around 400AD. - They came to Britain looking for farmland due to flooding of their own lands. - The Anglo Saxons came from Germany, Netherlands and Denmark and crossed the North Sea in wooden boats. - The Anglo-Saxons mainly settled alongside the Britons. - Anglo-Saxon settlements were very small; they did not understand the Roman ways and would not live in their towns. - They did not understand the Roman ways and would not live in their towns. The Anglo Saxons lived in wooden huts where families all slept together all in one room. - Artefacts from this time show that the Anglo-Saxons were sophisticated craftsmen. - Anglo-Saxons were proud warriors. - The Anglo-Saxons were Pagans when they first arrived in Britain but gradually became Christians. - Anglo-Saxon Britain saw the rise of Christianity with churches and monasteries being built.	- The Vikings sailed huge distances on long ships. - Vikings were expert boat builders and sailors. Their long ships were designed to float high in the water making landing on beaches easy. - The Vikings launched their first raid in 793AD at Lindisfarne and stole treasures from monasteries and murdered monks and civilians. - One of the most famous Anglo-Saxon kings was Alfred, who ruled from 871-899AD, fought the Vikings and then made peace so that English and Vikings settled down to live together. - The Vikings continued to raid, get paid and leave. - For the everyday people living under both Anglo-Saxon and Viking control, life was similar in many respects with farmworkers who worked the land and craftsmen who worked with various materials such as metals. - Viking society was structured in a similar way to Anglo-Saxon with a king. - In 1066 there were two invasions of England: a Viking and a Norman invasion. - The Vikings were defeated but the Normans succeeded in Conquering England, during the Battle of Hastings, bringing an end to Anglo-Saxon Britain.		

Geography	Locational Knowledge	Human and physical geography	Geographical skills and fieldwork
	- The Amazon rainforest and the Amazon River are located in Brazil, Peru, Colombia, Venezuela, Ecuador, Bolivia, Guyana, Suriname, French Guiana. - The world's largest mountains are the Andes, Himalayas. - The world's major rivers include the Nile, Amazon, Yangtze, Mississippi, Ganges, Mekong. - The significance of time zones can be explained, and differences between countries can be calculated - Geographical similarities and differences between a region in the UK, such as Yorkshire, and a region in South America, such as the Amazon Rainforest, can be	- Biomes are regions with similar climates and plant life. Specific biomes include deserts, rainforests, and tundra, each with unique features like temperature and vegetation. - The layers of a rainforest can be labelled: emergent layer, canopy, understory, and forest floor. - Deforestation refers to the cutting down of trees in rainforests. - A location can be explained with reference to physical features, such as the Amazon Rainforest being located in South America. - The future of a place can be predicted, considering physical and environmental changes like rising sea levels or urban growth.	- Google Earth or other digital tools can be used to locate a country or area of interest. - Ordnance survey symbols and their purposes can be identified and interpreted. - Fieldwork can be conducted to measure and observe physical features, such as rivers, coasts, and landforms. - Data can be recorded using charts, graphs, and digital tools to represent findings. - An itinerary for a journey to a place in another country can be worked out.

	compared in terms of climate, landscape, and human activity. - Physical features of a specific region, like the Lake District, include mountains, valleys, and lakes. - Human and physical geography in a locality can change over time, like the development of new towns or the destruction of natural habitats. - Changes in a local area are continual, such as new buildings being built or environmental changes due to climate, and opinions might vary on these changes, such as whether more houses should be built.	- The Amazon rainforest is valuable for biodiversity, oxygen production, and climate regulation, and ways to protect it include conservation efforts and sustainable practices. - Avalanches are caused by the movement of snow and ice down a slope, often triggered by factors like temperature or human activity. - The climate patterns of the alpine region are characterised by cold temperatures, snow, and glaciers.	
--	--	--	--

PSHE	Relationships	My Body, My Health	Life Cycles	Keeping Safe & Looking after myself	People who help me	Living in Our World	Feelings & Attitudes, Mental Wellbeing
							

Art and Design (knowledge of art and artists)	Drawing	Painting	Sculpture
	- Know that analogous colours are those colours next to each other on the colour wheel. - That temporary construction lines can be used to create a vanishing viewpoint. 3D objects have a tactile texture and when this is captured in a drawing, it is called implied texture.	- The horizon line is a horizontal line that runs across the paper or canvas to represent the viewer's eye level, or outline where the sky meets the ground. - To blend paints softly, they must use minimal pressure back and forth using an appropriate brush. - A palette knife is used to create thick tactile texture.	- Scaling is applied in art when something needs to be emphasised. - Colour can be used to emphasise items and areas within a sculpture. - Different levels of imprinting and patterning can detract from or add value to the overall sculpture.

Design Technology	Mechanisms	Food Technology	Textiles
	- That mechanical systems that use gears in everyday objects (eg bicycle, clock). - That gears and pulleys allow us to transfer movement and force from one part of a mechanical system to another. - That gears allow us to increase the output of a mechanism. - That market research is a way of collecting information about problems or needs. - That annotations are detailed labels and comments on diagrams. - That risks are things that might happen. - That sustainability means thinking about the materials that were used to make a product and how the product was made. - That evaluating their designs in detail will help them understand its successful and less successful parts. - That feedback should be positive, helpful and specific.		

RE	Why do Christians celebrate Christmas?	What is the importance of Holy Week in the Christian calendar?	What is important to Sikhs?		
	- That Christians learn from the Christmas Story that Jesus was the incarnation of God. - How to reflect on stories and events to whether they happened exactly as they are recorded. - Find out information about the Christmas Story from the Bible.	- Explain how some events in Holy Week tell Christians about Jesus's purpose/destiny - Christians believe that Jesus defeated death through his resurrection. - Jesus was welcomed on Palm Sunday into Jerusalem by crowds of people emphasising his importance. - Explain whether God intended Jesus to be crucified or if his crucifixion was the consequence of Holy Week.	- Sikhism was founded by Guru Nanak around 500 years ago in a place called the Punjab. - Sikhs believe in one God who guides and protects them. - They believe everyone is equal before God. Sikhs believe that your actions are important and you should lead a good life. They believe the way to do this is: Keep God in your heart and mind at all times. Live honestly and work hard. Treat everyone equally. Be generous to those		

			less fortunate than you. Serve others. - The Sikh place of worship is called a Gurdwara – the Golden Temple. - The Langar is a shared meal.		
--	--	--	--	--	--

Music	Untuned Percussion	Structure	Musical Notation	Singing	Composition	Improvisation
						

Online Safety	Privacy and Security	Online Relationships	Health, Welbeing and Lifestyle	Online Bullying
				
	Online Reputation	Managing Online Information	Self-image and identity	Copyright and Ownership

Computing	General Skills	Publishing (Pages)	Presentation (Keynote)	Filmmaking (iMovie)
				
	Sound production (Garageband)	Coding (Scratch)	Data Handling (Numbers)	VR/AR Reality Composer

French	Unit 9: Past Continuous Tense	Unit 10: Third Group Nouns	Unit 11: Possessive Noun Endings	Unit 12: Negatives, Commands and Conjunctions
				

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 in to a curriculum lesson
- Taught there and then – as part of the retrieval session
- Embedded in to 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 in to the curriculum, it is hoped that the vast majority of children will have the above knowledge firmly embedded in to their long term memory.