### CURRICULUM DESIGN



### OUR VISION FOR EXCELLENCE



Our curriculum is designed around three domains of learning - knowing, becoming and feeling - which pupils can build upon wherever they go. These core domains of learning, represented by the head, hands and heart, offer pupils the essential knowledge they need, and the opportunity to develop fluency, automaticity and passion across the curriculum.

#### **KNOWING**

At the heart of learning is knowing. Pupils will be given the knowledge they need, across the curriculum, to become proficient in their learning. We recognise that children cannot just 'do' tasks or solve problems - they require a secure grounding in knowledge of concepts, components, processes, facts, techniques, and principles. The acquisition of such knowledge is therefore core to children being able to progress. We break down this knowledge into the small steps needed to underpin pupils' learning, building these progressively to establish children's mental maps of a subject - which they can constantly expand upon and develop. We also identify the generative 'sticky' knowledge within each subject - recognising that not every fact, figure, concept, name or date introduced to children will be retained - but ensuring that those elements which are truly fundamental to progression are secured and consolidated to support long-term learning.



S KNOWLEDGE
INCREASES,
WONDER
DEEPENS."
- CHARLES
MORGAN



"KNOWLEDGE IS
OF NO VALUE
UNLESS YOU
PUT IT INTO
PRACTICE."
- ANTON
CHEKHOV

### BECOMING

Whilst knowledge forms the bedrock of learning, pupils need to be provided with the opportunity to put such knowledge into practice. Knowing the phonetic code does not make a reader, knowing times tables does not make a mathematician, knowing about evaporation does not make a scientist, and knowing a chord progression does not make a musician. Our curriculum is therefore designed to help children to become proficient in different subjects; to enable them to see themselves as authors, artists, scientists, historians, athletes, designers etc. We do this by using the knowledge gained within a subject in a variety of ways according to the discipline pupils are studying. Again, we recognise that the ability to operate in these ways is not automatic, children must be scaffolded in the steps needed to do so, and our curriculum includes both the opportunities and the support to enable this.

#### **FEELING**

Lastly, we recognise the importance of engaging the heart of a pupil in their learning. Pupils can know facts and practise disciplines, but if their emotions are not stirred then they will never be inspired. Thus a final key component of our curriculum is to help pupils to explore their feelings within their subjects – to have rich experiences and the opportunity to reflect on these. Whether it is discovering a new author, conquering a mathematical puzzle, being captured by the wonder of space, encountering a piece of music that moves them, getting caught up in the joy of digital creativity or even disliking an artistic style, we ensure the curriculum is rich enough to provide these experiences for children's feelings to be provoked and explored.



## READING CURRICULUM DESIGN



"KEEP READING. IT IS
ONE OF THE MOST
MARVELLOUS
ADVENTURES
ANYONE CAN EVER
HAVE."
- LLOYD ALEXANDER



KNOWING



**BECOMING** 



FEELING



Reading is the most important indicator of future academic success, as well as the social mobility that is linked to this. We know that reading is the key that unlocks all learning – and that to access other subjects, we need to take children on the journey of both learning to read, and then reading to learn. But we also know that reading isn't just a subject, an academic discipline, or a means to an end – rather, we want to grow life-long lovers of literature, by helping children find the books that lead them to develop a habit of reading for pleasure. Quality texts also open the doors to other cultures, emotions and different experiences – something that we prioritise in our context as part of our personal development work.

The first core component of reading is understanding the systematic code of Phonics. To achieve this, we follow the highly structured Little Wandle Systematic Synthetic Phonics programme through EYFS, KS1 and into KS2 where needed. Fidelity to this scheme is vital, as it provides children with basic knowledge they need to decode texts. Where children have gaps (whether moving from other schools / countries, or due to barriers to learning), they are provided with additional catch up sessions to ensure that the foundations of phonics are secured. Building on these, we introduce the generative knowledge of comprehension under the domains of Vocabulary, Inference, Prediction, Explanation, Retrieval and Summarising. These form the cornerstones for pupils' increasing depth of insight into the texts they encounter. In addition, such knowledge undergirds personal development - as pupils enhance their empathy, become informed citizens, and develop and articulate their arguments and opinions. Vocabulary acquisition and understanding is fundamental within our Reading curriculum; as pupils build knowledge of words, etymology and morphology they can access new learning across other subjects (e.g. through historical sources or scientific texts etc.). The final aspect of reading knowledge we introduce relates to texts themselves: studying authors, genres, styles and literary features. These are all introduced through high quality books - with a view to embracing diversity, fostering engagement, and widening the scope of pupils' literary experiences.

When we think about pupils 'becoming readers', we mean much more than people who can decode a text and answer questions about it. Our reading curriculum is designed initially to provide pupils with the fluency and automaticity they need in order to reduce the cognitive load of decoding and thus to focus on the wider elements of reading. Pupils can then read with a writerly eye – to inform and inspire their work as authors. We build on this analytical approach towards understanding authorial intent – critical to children's next steps into Key Stage 3. We encourage pupils to read aloud to develop prosody - becoming performers, storytellers, presenters, predictors and debaters. Through understanding word-origins, pupils become familiar with the science of linguistics – excavating our language and playing with vocabulary. Personalised class libraries with a wide range of genres available provide children with access to quality, stimulating and challenging texts from which they can make their own choices and selections in KS2. As we read together, talk about books, explore language and listen to stories, the whole school community is involved in modelling and fostering a love of reading to ignite children's delight in the written word.

A book is a doorway to another world - and, indeed, another's world. Reading is the perfect vehicle to explore and experience emotions safely - from an introductory level unpicking a character's feelings in a simple story in EYFS or KSI; through to developing deeper empathy with complex texts in later years. Through frequent book-talk, pupils get to evaluate and recommend texts to one another - empowering their flexibility and ownership of the reading process. Guided evaluation by expert questioning in lessons supports children in understanding authorial intent and their own responses to this, and support is given to pupils in selecting a breadth of texts, authors and genres to capture their enthusiasm. SEND pupils in particular benefit hugely from learning the vocabulary of feelings and having these validated through reading; indeed, developing the language of emotion for all pupils allows them to better understand their own hearts, and provides children with the means to express themselves as they process their complex lives.

# WRITING CURRICULUM DESIGN



"IF YOU WANT TO CHANGE THE WORLD, PICK UP YOUR PEN AND WRITE"

- MARTIN LUTHER



KNOWING



**BECOMING** 



**FEELING** 



When children write, they are given the chance to find their voice, to express themselves, and to describe and make sense of the world around them. Our writing curriculum is designed to equip pupils to write with clarity, precision, passion and integrity. We want to balance children's inherent creativity with the technical elements of recording. Thus, pupils can explore and play with words, structures and styles as they learn to organise their thoughts and realise their voice. They put themselves in another's shoes, both in terms of characterisation, and as authors – newspaper reporters, diarists, storytellers, script-writers etc. Almost all our extended writing arises from and is inspired by quality texts that children are introduced to through their reading – it is therefore purposeful and offers an opportunity to mirror the authorial styles and ideas of others. Through our planning process (writing rectangles), children influence and contribute their ideas towards an end point, which is stewarded by teachers to ensure coverage of all core elements. Ultimately, writing is a way for each individual to leave their mark on history and contribute to the world – and we want to empower our pupils to do exactly that.

Essentially, the knowledge underpinning writing sits within two overarching domains: transcription and composition. In the early years and key stage one, huge focus is placed on the technical aspects of basic transcription: the motor skills of letter formation, the process of encoding (spelling) by applying phonics, and basic grammatical terms and structures. As pupils move through school, more complex grammatical forms and punctuation are introduced as pupils learn to combine and construct sentences in a variety of ways. Part of this involves acquiring the knowledge to edit effectively to ensure accuracy. The aim is to make transcription as automatic as possible, thus reducing cognitive load and allowing a focus on the second domain of composition. Fundamental knowledge underpinning composition is: the development of a wide range of vocabulary (a process which begins in Early Years); encountering and applying literary features; and writing for different purposes. Vocabulary is both explicitly taught and drawn extensively from the quality texts which inspire pupils' writing, giving children the chance to revisit and apply new words, consolidating these in their long term memory. As children encounter different genres and forms in their reading, knowledge of the features of these is unpacked and explained, so that they can make informed choices about their authorial style and approach - shaping their descriptive, narrative, instructional, persuasive, or poetic writing appropriately.

Becoming a great writer is infinitely more than putting pen to paper to record a sentence. Whilst these basics are the starting point, and our youngest children need to be supported with these, the longer term goal is for pupils to find their voice, to step into another's shoes, and to compose for a range of audiences. There is a daily expectation that writing is a vehicle to evidence learning in a range of subjects and we use a variety of tools to support those who are struggling (e.g. scaffolds, word-mats, digital platforms etc.). The use of journals supports note-taking and drafting, and whole-class marking provides specific, reflective feedback to help all to improve and edit their work. In becoming writers, children showcase and apply the knowledge they have acquired - building on the links made with reading. We explicitly make children aware of the 'process approach' of becoming a writer: reading, vocabulary development, practising skills discretely, drafting, planning, composing, editing and re-drafting. At every step of the way, pupils are given the chance to embed their learning as they express, shape and craft their ideas with the aim of becoming experts in this process.

Composing and writing can be a hugely emotive process - from the frustration of physically struggling with letter formation or writers' block, to the joy of communicating your vision effectively or delighting an audience. The process of editing offers children a chance to reflect on their strengths and areas for improvement - something we know some pupils struggle with and require support to achieve. Writing also allows pupils to develop personal preferences - some love the creativity of narrative, others the logical precision of instructional texts. Children are able to explore different contexts and empathise with characters through their writing. The motivation to write is increased through planning purposeful writing outcomes, which are shared and celebrated regularly. Pupils thus build confidence in their accomplishments: from the earliest recording of single words or phrases, through to producing extended narratives - we want every child to experience delight and pride in their writing.

## MATHS CURRICULUM DESIGN



"MATHEMATICS
IS NOT A
LANGUAGE,
IT'S AN
ADVENTURE"
- PAUL LOCKHART



#### KNOWING



#### BECOMING



#### **FEELING**



Mathematics is vital to every element of our lives. Underpinning science, engineering, finance, computing, and a myriad of other disciplines, secure mathematical knowledge is core to future success. Taught daily through formal lessons with additional fluency sessions and integrated learning (e.g. in provision or across the curriculum), maths is therefore a central part of our learning at Leeming. We start this journey by following NCETM's Mastering Number scheme in both EYFS and KS1 to secure firm foundations in the development of good number sense. We base our main lessons on the White Rose Maths mastery-based scheme of work – used in 80% of UK primary schools, and across 140 countries - since many of our pupils will move during their time in school there is a high probability that they will encounter the same scheme elsewhere, thus allowing us to build their cumulative knowledge.

The knowledge associated with mathematics is vast, but can be expressed through three primary aspects: facts and formula (declarative knowledge) "I know that", methodology and approach (procedural knowledge) "I know how" and problem solving and reasoning (conditional knowledge)" I know when". As pupils learn across these areas, they will know not only facts (number-bonds, times tables, laws, shape properties, equations etc.), but also how to use these facts by applying them to calculations, and when to use different operations and formula to solve problems. Through White Rose Maths, we build this knowledge progressively and cyclically. WRM is based on the DfE's 'Ready to Progress' criteria, but subdivides each of these elements into the smaller steps vital for children to master in order to become secure in their maths knowledge. This helps children not to become overloaded with big concepts, allowing their working memory to process each component and slowly synthesise this learning into a cohesive whole.

It is, of course, crucial that children do not attempt to assimilate maths knowledge without the opportunity to put this into practice. It is not enough to be told '2 + 2 = 4'; children must be given the chance to explore this learning in practical ways - for example through manipulatives (hands-on resources) and experimentation - to embed a deep understanding of what would otherwise be an abstract concept. Becoming a mathematician begins from the moment children start in the Early Years, securing basic number fluency and learning the foundations of mathematics. This continues throughout the curriculum; as children are presented with mathematical questions and challenges, they are constantly reinforcing their learning and consolidating their knowledge through reasoning and the development of mathematical thinking. Our aim is that pupils will develop automaticity, rapid recall and mathematical fluency by constantly putting the knowledge they are taught into practice - both independently and collaboratively - and that they will be able to apply it in new and unfamiliar situations. Where appropriate, we also seek to draw mathematics into other curriculum areas (e.g. Science) to promote and model the ways maths is intrinsic to different careers and disciplines.

Maths is not, perhaps, thought of traditionally as emotive as one of the arts. However, we find our pupils develop huge emotional reactions to maths and we strive to develop a "cando" attitude. It also isn't always about finding one right answer. The thrill of unlocking the 'code' of mathematics – seeing relationships between numbers and operations, the ways in which a formula can help crack a tricky calculation etc. can be exhilarating. We also know that maths can easily be a subject that pupils find frustrating or demoralising – it is our job, therefore, to inspire and scaffold pupils who are struggling with maths to ensure that they overcome these obstacles and embrace the emotions associated with both challenge and success. By regularly including problem solving, but doing so in context and at the right time within a unit of learning - using the declarative and procedural knowledge pupils have gained previously - children are empowered to experience the excitement of maths and develop confidence in the subject.

# SCIENCE CURRICULUM DESIGN



"SCIENCE IS A WAY
OF THINKING
MUCH MORE THAN
IT IS A BODY OF
KNOWLEDGE"

- CARL SAGAN



KNOWING



BECOMING



**FEELING** 



Our science curriculum encourages children to ask questions and build on their natural curiosity about the universe. Throughout their time with us, children will acquire and develop the key knowledge set out by the national curriculum. To deliver this, we have chosen to use the Developing Experts (DE) scheme of learning. This actually goes beyond the basic content of the national curriculum - many of our pupils have parents associated with STEM, and thus thrive on the aspirational aspects of the DE curriculum. We also want to help pupils understand the application of what they learn in the wider world - and to build the necessary 'Science Capital' to retain and integrate the new concepts they discover.

Children are introduced to the key concepts of science (substantive knowledge) across the national curriculum areas which broadly span biology, chemistry and physics. DE breaks down these big concepts into smaller components which build, year on year. Some aspects are revisited in every year group (e.g. Animals including Humans), whilst others are introduced earlier or later according to the complexity of subject matter (e.g. Electricity in KS2). The acquisition of a comprehensive scientific vocabulary is vital – pupils begin this journey in EYFS learning the language of knowledge and understanding of the world, and go on to build their bank of scientific terminology progressively through the years.

Alongside these substantive aspects, we also introduce children to the knowledge of working scientifically - the methods scientists use to establish facts and, indeed, to see our understanding of the universe change over time in the light of new evidence. These 'practices of science' (the disciplinary knowledge of the subject) include learning about different types of enquiry - research, pattern seeking, comparative testing, grouping, observation over time etc. We also know children can't just 'do' practical experiments - they need to be taught the knowledge underpinning such enquiries. DE introduces this gradually, breaking this process down into learning about how to: ask questions & develop enquiries; predict & compare; observe & classify; gather & present data; and evaluate findings. This knowledge is revisited and deepened in every phase of school, thus ensuring pupils don't develop misconceptions or utilise overly simplistic approaches.

This disciplinary knowledge taught must be put into practice, and it is through doing so that children get to 'become' scientists. Again, this is not an experience confined to Year 5 and 6 "doing an experiment". Rather, children of all ages are provided with rich experiences which will prompt questioning about the world around them. In EYFS, through play and exploration, children will be encouraged to observe and draw conclusions. This hands-on learning continues through school – science is all around us – cooking, playtimes, weather – opportunities for investigation are endless. As they head into KS1, pupils take more ownership of this process, using simple equipment, measuring, recording and sharing their

discoveries as they develop curiosity. By KS2, pupils are becoming confident and independent young scientists. They are encouraged to raise questions, develop hypotheses and undertake their own more formal enquiries. In addition, we want to set children up to become the scientists of the future and tackle the gender and ethnicity gaps within the field. To do so, we regularly introduce pupils to real-life scientists, not only the 'greats' of history like Einstein, but ordinary women and men that children relate to, thus building their science capital and belief that they too can shape our understanding of the world in years to come.

Science is full of emotion: the thrill of discovery, the curiosity of questions, the anticipation of a long awaited result, the frustration of an unfulfilled prediction or the struggle of wrestling through a complex set of data. We seek to embrace and unpack this aspect of children's scientific learning – helping them to overcome challenges and harness their enthusiasm. Teachers use what they know about their pupils to relate science to students' own lives, making the subject more meaningful and accessible. We capitalise on our context to inspire children – working with RAF STEM ambassadors and university researchers. As children get older, we even introduce some discussion of the ethics of science, and the impact of our

discovery and the excitement that they can shape our world as the scientists of the future.

INSPIRING EXCELLENCE

"We care, we respect, we do our best"

actions on the world. Ultimately, we want children to have their emotions stirred by

## COMPUTING CURRICULUM DESIGN



"EVERYONE IN THIS COUNTRY SHOULD LEARN HOW TO PROGRAM BECAUSE IT TEACHES YOU HOW TO THINK"



KNOWING



**BECOMING** 



FEELING



In the digital age in which we live, computing is clearly vital. Well developed computing knowledge can unlock huge potential for pupils in terms of access to other learning - through research, communication and presentation - as well as by opening up opportunities for careers and roles that haven't even been invented yet. We recognise that often, children's prior computing knowledge is exceptionally imbalanced; there will be areas (such as gaming, use of certain devices, communication etc.) that are extremely well developed through access to technology at home, whilst other crucial elements have never been encountered. We have chosen to deliver our curriculum through an adapted version of the Teach Computing scheme of learning developed by the National Centre for Computing Education. This offers comprehensive coverage of all key components, sequenced progressively in a spiral pattern to build upon prior learning. This scheme was also selected over others due to its transferability, and because it directly tackles our children's imbalance of knowledge of different computing platforms (both in terms of hardware and software) as identified above empowering children to work across a range of end-user devices and digital ecosystems.

The knowledge of computing within our curriculum in built around 10 strands. Seven of these are delivered within four overarching modules: computing systems and networks; programming, algorithms, design & development; data & information; and creating media. The final three intersect with all modules: effective use of tools; impact of technology; and safety and security. Units are supported by learning graphs which introduce individual concepts and skills progressively to build towards an end-point. A key aspect of pupil knowledge that we deliver additionally to the Teach Computing scheme is E-safety. We are aware of the particular risks our children face online relating to our military context – a very high proportion have access to personal devices provided by parents to keep in touch with friends from previous schools, or family across the country. However, this access exposes pupils to a range of risks, thus we add additional e-safety knowledge to our curriculum – both discretely, and embedded within different units (e.g. searching and selecting information).

We want our pupils to become digitally literate across a range of platforms and devices. Children will become confident users of desktops, laptops, tablets and physical coding devices. We aim for pupils to develop automaticity with these devices, both in terms of taught processes, but also by acquiring the intuitive, transferrable skills to navigate these – e.g. through the recognition of icons, menus, folder structures etc. Pupils thus become coders, designers, media creators, data analysts through their computing, but they also become able to use technology purposefully throughout their life, including beyond school. Again, e-safety is key within this. This aspect of the curriculum is both proactively planned, but also responsive to intelligence being gathered more widely across school – e.g. through parental communication, safeguarding information, pupil voice etc. Becoming safe, responsible users of devices is just as important as becoming capable users of them.

Computing is a subject which frequently animates and excites. Children often love to see the impact of input, process, and output – watching as blocks of code transfer into animations, motion, sound; learning how to turn a dry, plain page of text into a vibrant presentation; transforming a table of numbers into a visual chart – these moments are celebrated and enjoyed. Of course, there are also frustrations with technology – computers that suddenly fail, documents that crash before being saved, buffering connections etc. – and therefore we help pupils navigate their feelings around these, and develop safeguards where possible to avoid such issues! Lastly, in the online world of social media and e-safety, we recognise the profound impact on feelings and mental health that is almost inevitable for our pupils as they grow older. Thus, through both computing, PSHCE, and pastoral care, we seek to help children to manage such emotions relating to the online world and their activity within it.

## HISTORY CURRICULUM DESIGN



"TO REMAIN
IGNORANT OF
HISTORY IS TO
REMAIN FOREVER
A CHILD"
- CICERO



KNOWING



**BECOMING** 



**FEELING** 



The study of History offers us the chance to understand not only our own cultural heritage, but also that of the world around us. Inevitably, our curriculum must be selective - we have carefully chosen content to equip pupils with a deep sense of key periods of the history of our nation, as well as to introduce them to less familiar civilizations globally. We have sequenced this learning to build from more accessible content to more abstract periods, especially for younger pupils. Chronological understanding is introduced in Early Years and builds through school. Children will study local, national and international history through teacher-led enquiry questions to understand how the past has shaped the present, and how historians approach their discipline in understanding the past.

Our curriculum focusses both on the substantive knowledge of historical periods (dates, names, events and context), as well as the disciplinary knowledge of the subject (how historians learn about the past). We teach the disciplinary concepts of sources and evidence, significance, similarity and difference, cause and consequence and interpretations not as discrete topics, but embedded within a context of the deep study of an aspect of a period of history. Part of this involves acquiring key vocabulary, relating to the specifics of events/ periods (Pudding Lane, Ptolemaic, Parthenon etc.); the broader ideas which transcend topics and time (empire, values, trade, migration etc.); and particular historiographical terms (evaluate, argument, interpretation, impact etc.). We are selective about the focus of our learning - looking for generative themes which occur across civilisations, continents and eras (rule, conflict etc.) and therefore study particular aspects in greater depth, rather than attempting a surface level overview of an entire period. That said, we also seek to ensure that specific knowledge of a topic (e.g. the life of a particular figure) can be contextualised in the wider background of that society. We use a variety of interpretations to help pupils acquire this knowledge - including contemporary sources, museums, sites and even the narratives of historical fiction.

We want our pupils to become passionate students of history – excited both about the periods and topics they study, but also interested in how historians build their understanding of the past. Through historical enquiry questions, we allow children to put this knowledge into practice – letting them wrestle with these complex ideas, drawing on and building their understanding of a period as they go. They engage with 'live' issues and real debates (such as the future of the Elgin / Parthenon Marbles), justifying their opinions and views based on historical interpretations and sources. In doing so, pupils can become genuine contributors – recognising that history is not a 'fixed' thing – history is always being 'made'. We also introduce to older pupils the idea that there are different ways of looking at something, and historians frequently disagree, but without suggesting that there is "no right answer" – recognising that sometimes history is a matter of interpretation, but that not all interpretations are equally valid. We therefore help children to become confident in their historical judgements - using their own knowledge and awareness of sources of evidence to support these.

Our military community offers a particularly close connection to aspects of history – most notably topics such as remembrance, war and conflict. Pupils' experience of studying these topics is carefully stewarded; embracing the rich heritage that the children have as armed forces families, but also recognising the emotional implications of certain themes. We want children (particularly younger pupils) to 'see themselves' and their lives reflected in history, so that it ceases to be abstract, preparing them for more complex learning later in the curriculum. We seek to engage pupils' passion for history and historiography by giving them direct access to inspirational experiences, and, where possible, embed this in the locality – considering sites, events and issues pertinent to this area or their own lived experience. Lastly through studying history, we introduce the concept of legacy - showing children that the actions of individuals can shape the future in profound ways - and giving them the self belief that their own actions can have such an impact as they grow and mature.

### GEOGRAPHY CURRICULUM DESIGN



"THE STUDY OF GEOGRAPHY IS ABOUT MORE THAN JUST MEMORISING PLACES ON A MAP. IT'S ABOUT UNDERSTANDING THE COMPLEXITY OF OUR WORLD."
- BARACK OBAMA



KNOWING



BECOMING



FEELING



A sense of place or belonging is an interesting concept for our pupils at Leeming. Whereas in most other schools, children will usually have grown up in one or maybe two locations, our pupils have often lived in many communities, counties and even countries by the time they arrive at our school. This provides them with a wonderful range of experiences from which we can draw and build on in our Geography learning – comparing, contrasting and studying these locations. Our curriculum helps pupils root their experiences in a sense of scale by studying geography at a local, regional and global level. We help children to appreciate the uniqueness of Geography as a mixed science, reflecting both social and natural sciences and the interplay between these as they look at how places change over time. We want to help pupils to understand and engage with features of their immediate locality, as well as developing curiosity and excitement about other places around the country and the globe.

The knowledge underpinning our Geography curriculum is based around the four substantive domains of Locational Knowledge; Place Knowledge; Human and Physical Geography; and Geographical Skills including Fieldwork. These domains cover the various aspects of the national curriculum, and allow us to provide pupils with a clear progression in their learning – from basic oral or pictorial descriptions of locations in EYFS to utilising six-figure grid references and complex symbols by Y6. Similarly, pupils learn about comparing and contrasting locations both within and beyond Europe, covering both natural and human features of their landscapes. In so doing, pupils learn why changes occur to environments and the impact such changes can have. Pupils are exposed to a range of digital and paper-based maps to gain familiarity with decoding these. By regularly returning to this core learning, they become totally fluent in their ability to use maps, thus reducing cognitive load to allow them to develop other geographical concepts. Throughout the curriculum, the acquisition of key geographical vocabulary and terminology is fundamental to progression.

knowledge of geography. It is this disciplinary knowledge – of how to ask questions, explore connections between places, make observations or consider implications – that underpins the idea of our pupils 'becoming geographers'. Pupils are encouraged to develop this disciplinary knowledge by engaging with real issues and environments – for example undertaking fieldwork in our own locality or further afield and asking questions about why things are as they appear, or how they might be changing in response to different activities. This brings theoretical classroom learning into the real outdoor environment. We help children to see how geographers can shape our understanding of the world we live in, and the ways our behaviour affects it. By introducing children to the ideas of human impact, climate zones, trade links etc., they can begin to think critically about their choices and activities. As we consider such matters, we try to avoid stereotypes and misconceptions – no geographer would present a single city as representative of a whole country, or suggest that every mountain looks like Everest - similarly, we would seek to help children understand whether what they are studying is a snap-shot of a feature or location or something that is representative of a wider area or concept.

Alongside this substantive knowledge, children are equipped with the disciplinary

Making links to pupils' lived experience helps us to engage children's hearts in geography. We do this wherever possible – drawing on their diverse backgrounds in order to develop their thinking. Geography is a subject of huge excitement - whether cracking the code of a map or encountering, in the reality of a riverbank or rock face, the evidence of a theoretical concept such as erosion – it's full of moments of discovery. It is also a subject for reflection, and we seek to enable pupils to step back and engage their minds and their hearts as they evaluate human impact – for instance through climate change, deforestation or land use. Ultimately, we want pupils to believe that the choices they make really matter, and to be inspired to explore the world around them.

### ART CURRICULUM DESIGN



"ART IS NOT WHAT YOU SEE, BUT WHAT YOU MAKE OTHERS SEE"

- EDGAR DEGAS



KNOWING



BECOMING



**FEELING** 



A core aim of our Art curriculum is that, by the time every child leaves the school, they will have found an area of the visual arts that is relevant and inspiring for them; whether through drawing, making, designing or even simply talking about and reflecting on art. To achieve this, we create as many different kinds of opportunities as possible so that each child finds the element that 'strikes a chord' with them. Thus, we cover a variety of techniques, materials, disciplines and approaches. We use an adapted scheme of work (Kapow Art and DT), which deliberately alternates Art and DT each half term. This allows us to really go 'deep' when teaching each subject, carefully unpacking the tangible components needed to acquire artistic knowledge, rather than skimming the surface through lots of art-based activities. We know our pupils are highly mobile, so the curriculum ensures a balance between units focussing on developing pupils' knowledge in a discrete way (to achieve fluency), alongside opportunities to apply this through experimentation and creativity.

The curriculum is designed around five strands, delivered through four units. The strands form the substantive knowledge which children build progressively over time: generating ideas; using sketchbooks; making skills and formal elements (line, shape, tone, texture, pattern and colour); knowledge of artists; and evaluating and analysing. This knowledge is embedded in the practical units of Drawing; Painting & Mixed Media; Sculpture & 3D; and Craft & Design. This ensures that methods, techniques, vocabulary etc. are not isolated from a real applied context for children's thinking. Alongside the practical components, pupils also consider the theory of art – discussing different artists and their work, and learning about traditional, modern and contemporary art paradigms (the disciplinary knowledge of the subject). Units introduce knowledge progressively, and our two year rolling programme allows each phase to build on learning previously acquired. Aspects are also frequently revisited – such as applying what children have learned in mixed-media to a sculpture unit, or utilising their drawing techniques in designing a piece of craft.

Art is, by nature, an extremely practical subject, in which pupils get to become painters, sculptors, designers etc. as they put knowledge into practice. This is, obviously, a crucial element of our curriculum, and there are lots of opportunities for selecting materials, experimenting and developing fluency as children make their own art. Creativity and independent outcomes are robustly embedded, supporting pupils in learning how to make their own creative choices and decisions so that their outcomes, whilst being knowledgerich, are also unique and personal. However, becoming an artist is more than being able to generate pieces of work: developing a critical artistic eye, evaluating, seeking meaning, dialoguing, and developing the self-awareness by which art can become a vehicle of self-expression are all parts of becoming an artist. We want pupils to become individuals who can apply their art learning in future life personally or professionally – designing a garden, selecting décor, working in fashion, composing photographs – all these have their roots in art – and we seek to lay these foundations in our curriculum.

Art is a perfect subject for expression of, and reflection on, our feelings and emotions. We seek, where possible, to let children make their own choices and generate ideas, inspired by the work of others, and their own feelings. Pupils are encouraged to celebrate each other's artistic efforts, not by way of simple 'replication' (no primary pupil will be able to recreate a Constable painting!), but through combining their burgeoning technical skills with contextual and conceptual understanding. We therefore help pupils to feel entitled to embrace their own creativity as something which is important to them, and is valuable to society. We consider not only famous artists from history, but local figures that children can relate to (such as Lucy Pittaway), and give pupils a voice to express their feelings (positive or negative) towards the art they explore.

### DT CURRICULUM DESIGN



"CREATIVITY IS
ALLOWING
YOURSELF TO
MAKE MISTAKES.
DESIGN IS
KNOWING WHICH
ONES TO KEEP."
- SCOTT ADAMS



KNOWING



BECOMING



**FEELING** 



Virtually everything around us has been designed and engineered in some way. This is particularly evident in our RAF context – pupils are surrounded by complex technical creations – aircraft, buildings, communications arrays etc. Through our DT learning, children are given the opportunity to develop their curiosity and capability - combining designing and making skills with their developing knowledge and understanding to create quality products. DT enables children to draw on their maths, science, computing, and art skills. Through engaging in the iterative process of designing and making children learn to think creatively and solve problems as individuals and as part of a team. We use an adapted scheme (Kapow DT) to support teaching and learning. This scheme returns cyclically to key concepts so children who join part way through a year or key stage can still cover all aspects. Classes work in Key Stage Phases to complete half termly projects, alternating with Art, to promote depth of learning.

The knowledge required in DT covers 4 main domains - cooking & nutrition; structures; electrical & mechanical systems; and textiles - with an additional digital element in KS2. Through these domains, children will be progressively introduced to key concepts, terms and ideas. We aim to develop the children's substantive knowledge of the technical elements and vocabulary of DT, such as information about materials, structures, components, mechanisms, aesthetics, nutrition etc. Alongside this, pupils' disciplinary knowledge of the design, make and evaluate processes is developed - from play-based experimentation in Early Years to meeting detailed design briefs and critically evaluating products in Key Stage 2. We acknowledge that with our mobile context, pupils may not have a completely secure technical or subject knowledge from previous years, but endeavour to introduce content progressively and establish new generative knowledge alongside the vocabulary needed to allow children to progress. The recall of prior learning is encouraged through knowledge catcher quizzes and key vocabulary is consolidated throughout each unit of work.

Our curriculum provides meaningful contexts for children to become designers and manufacturers. We know that the ability to do so is not automatic however, and therefore give them the small steps required to undertake this process - through research and evaluation of existing products; studying key individuals & designers; learning about materials and tools, and developing their practical expertise. Once focused practical skills have been taught and honed, this will lead to the creation of products. We aspire for children to successfully apply their growing technical skills to each project, having had the opportunity to practise without the fear of failure. Children will grow to recognise the functional and aesthetic properties of materials they select, collaborate with others, adapt their designs flexibly and communicate their ideas. As the children's conditional knowledge develops and they learn to understand the iterative nature of DT, children will evaluate, modify, or improve their product successfully in an age appropriate way. We also want to equip our children to become creators (and consumers!) of great food - health, nutrition, flavour, presentation - these are all aspects taught within our DT units.

DT can be a hugely motivating or deeply frustrating subject! We seek to ensure that the former is the case, by equipping children with a repertoire of knowledge, practical skills and understanding to enable them to create effective models and prototypes to fulfil a need. Equally, we embrace the evaluation and review aspect of design – acknowledging that the finest designers experience failures or setbacks and that this is all part of the process of refining a product. We help children become excited by DT by showing how the development of these practical manufacturing skills are relevant to their own experience or that of their immediate family - for example in the engineering, technical and mechanical roles within the RAF, in addition to careers as a chefs, electricians or digital communications – within or beyond the military. Through their study of key individuals, children are helped to make sense of the world they live in and prepare them to participate in a rapidly changing world with confidence and passion.

## MUSIC CURRICULUM DESIGN



"WHERE WORDS FAIL, MUSIC SPEAKS" - HANS CHRISTIAN ANDERSON



KNOWING



BECOMING



**FEELING** 



Music is a universal language which embodies one of the highest forms of creativity. We want our children to develop their talent as musicians and find a love for both creating and listening to music. We recognise that our mobile pupils arrive with huge variations in the depth of their previous musical education and are often with us for a short time only - as a result we know that a deep mastery of one particular instrument is not likely to be possible to achieve in school. Therefore, through the use of an adapted scheme of learning (Kapow Music), we seek to ensure children gain an understanding of what music is, and the core transferrable knowledge which can be applied to both listening & performing a range of instruments, including the human voice. We want to encourage children to develop their curiosity for global music - teaching children to respect and appreciate the music of all traditions and communities. The scheme revisits key concepts cyclically over the years, enabling pupils who join part way through the key stage to still cover all aspects.

Our pupils build knowledge across four key domains: listening, performing, composing, and the history of music. A fifth aspect – the inter-related dimensions of music - teaches the 'building blocks' of music: pitch, pulse, dynamics, notation etc. These components transect all other domains and are taught within context of these. This is because, before we ask children to undertake complex tasks such as performance, these individual elements need to be taught separately as small steps. If secure with these individual components, automaticity and fluency is developed and cognitive load is reduced. The curriculum therefore returns frequently to core knowledge e.g. by recapping taught vocabulary, concepts or techniques before learning new content which builds on this. Most of this knowledge falls into the categories of declarative knowledge (facts such as keys, chords, musical culture etc.) or procedural knowledge (note names, dynamics, tempo, techniques etc.). By equipping children with such knowledge, they are able to analyse, perform, construct and, importantly, deconstruct music appropriately.

Rhyme and rhythm are utilised through the learning of phonics, and maths. Singing and music making opportunities are used to embed learning and develop musical awareness to demonstrate how music can be used to express feelings. These form the building blocks for progression in KS1 and 2, as children develop more formal learning through the Kapow scheme. Children are given opportunities to practise techniques and rehearse them before performing for peers in lessons. Wider opportunities to link music and drama through plays and productions are also provided to children – including collectively (e.g. choirs) or individually (as soloists). Some pupils also take up the opportunities for private lessons with local peripatetic teachers; this is rare however, largely linked to our context and mobility – there are often long waits for the availability of these services. Becoming musically literate at Leeming is not only about performing or writing music however. It is also about becoming a great listener – both technically and expressively. This also offers scope for wider cultural development – studying music from other countries and eras and becoming aware of the social and symbolic

Music begins in the Early years setting and is an integral part of the children's learning journey.

Music, perhaps more than any other subject, has the capacity to move our emotions. The sadness of a minor melodic line, the drama of a great orchestral work or the exhilaration of a rock anthem are all perfect examples of this. Through our music lessons, we help pupils to tap into the ways in which music stirs our heart – either reflecting or even shaping our feelings. We also cover this element in other subjects – such as the place of music in worship (RE), or its calming effects (PSHCE). We know that music can be a vehicle to increase pupils' self-confidence, creativity and sense of achievement. A child who may never shine in maths or on the football pitch can move an audience to tears with a song. Much of the tacit knowledge of music is reflected in our feelings – our youngest pupils can describe how a song makes them feel, without necessarily having the technical language to describe why this is so. Frequent exposure to music is key to developing this tacit knowledge, and we seek to achieve this encultured learning through discrete lessons as well as embedded practice across school (e.g. assemblies, special event days, performances and concerts).

functions of music, and pupils' own opinions and responses.

### PE CURRICULUM DESIGN



"INTELLIGENCE AND SKILLS CAN ONLY FUNCTION AT THE PEAK OF THEIR CAPACITY WHEN THE BODY IS HEALTHY AND STRONG" - JOHN F. KENNEDY



#### KNOWING



#### BECOMING



#### **FEELING**



Physical Education intrinsic to the life of our school - it is viewed not only as a discrete subject, but a tool through which to develop many character attributes, practical skills and to embed knowledge. It gives children opportunities to gain and develop expertise (knowing), apply skills in engaging, fun and competitive scenarios (becoming) and the chance to reflect on mental and physical performance as well as wellbeing (feeling) on their journey to becoming healthy citizens of the future with a love of sport.

In PE, two strands are particularly important in our school: declarative knowledge (knowing what) and procedural knowledge (knowing how). Bringing these two together through insightful assessment and carefully planned, realistic lessons allow pupils to develop their physical competence progressively.

Fundamental Movement Skills (FMS) are taught and tracked carefully through KS1 with explicit teaching of core movement skills and exciting scenarios in which to apply them. KS2 teaching develops FMS further by introducing higher-order and more complex ideas. Teachers ensure pupils have knowledge of rules, strategies and tactics in order to direct and guide successful movement intelligently and effectively in scenarios.

Regardless of age, all children will develop:

- knowing about safety issues and how to manage these;
- -knowing how previously learned skills serve as building blocks for future progress;
  - knowing the language and vocabulary of PE;
  - -knowing about influential sports figures to inspire improvement;
- -knowing 'what a good one looks like' so they have a clear model to work towards.

  Practical, mental and wellbeing skills are tracked carefully and precise, skill-based opportunities are tailored to the children's needs, allowing them to make good progress in their knowledge.

Children are encouraged to think, act and reflect like sportswomen/men and athletes. They have the opportunity to apply the knowledge they have gained through a range of engaging, exciting and challenging scenarios. These include active daily opportunities, carefully planned drills in sessions and competitive 'game' or 'performance' scenarios. All of these 'becoming' opportunities give children the chance to apply our RESPECT personal development skills and reflect upon the impact these have on performance. It is vital that these opportunities to develop are not exclusive to PE lessons alone, but can be experienced during playtimes, in extracurricular clubs, during daily sensory breaks and through inter and intra school competitions and visits. Collaboration is key in this area as younger children learn through PE the benefits of teamwork, whilst older children also learn the merit in passing their expertise and strengths onto others through opportunities such as becoming playground leaders and mentors.

Whether it's the thrill of pulling off a well-rehearsed gymnastics sequence; the rush of scoring a goal as a result of brilliant team play, or the sense of achievement from mastering the perfect javelin throwing technique in a competition, PE is an opportunity to make a positive and lifelong emotional connection to sport. In teams, small groups or even individually we consistently encourage children to reflect on their experiences in all areas of PE. Three cornerstones of any phase of learning are to encourage children to reflect on:

- the impact sport and exercise has on their bodies (identifying and discussing aspects of fitness)
  - how they can challenge themselves to improve personal and team performance
  - the importance of fair play, respecting rules, valuing others strengths, teamwork and sportsmanship

PE in our school gives all children the regular opportunity to combine a range of knowledge, practical and problem-solving skills in purposeful learning scenarios; giving all the chance to see instant and progressive results and many of our more physical, hands-on learners that vital chance to shine.

## FRENCH CURRICULUM DESIGN



"TO HAVE
ANOTHER
LANGUAGE IS
TO POSSESS A
SECOND
SOUL"
- CHARLEMAGNE



KNOWING



**BECOMING** 



**FEELING** 



French is a rich language, the history of which is bound to the UK since the Norman period. In studying French therefore, children are helped to see cognates and similarities between a language which at first glance seems entirely different from English. In addition, since we receive pupils from all over the country (and, indeed, the world), we chose a language which is frequently taught in Primary schools to try to offer pupils who move around consistency in their study; our main feeder secondary also teaches French in KS3. We use an adapted scheme of learning (Kapow French) to support pupils with acquiring knowledge and confidence in French. The scheme returns to key concepts cyclically over the years, meaning pupils who join part-way through the Key Stage still cover all aspects.

The knowledge required in acquiring a new language is complex. We seek to introduce pupils to 4 key domains – speaking and pronunciation, listening, reading and writing, and grammar. Through these, pupils are introduced progressively to the key concepts of language: new vocabulary, the phonetic code of French (and its differences from English), and the way the language is constructed grammatically. Often, words and phrases are introduced receptively initially to anchor these in children's minds before they are required to use them productively. We recognise that with our mobile context, pupils may not have totally secure subject knowledge from previous years, but endeavour to introduce new knowledge progressively and establish prior learning in order to begin to build generative knowledge in each domain. Lastly, we equip children with two other areas of knowledge which complement the core learning of the language – detective skills (including cognate recognition, use of context to make predictions etc.) and intercultural understanding to help pupils embed their language learning in a wider societal awareness.

Learning isolated vocabulary lists or information about grammatical agreement alone does not make a competent linguist. We therefore provide pupils with ongoing opportunities to put their learning into practice – whether through simple phrases embedded in the school day (thus making the language purposeful), or through structured opportunities within lessons (e.g. basic conversations, writing simple sentences, paired discussions or extracting meaning from written text). Thus, pupils will start to become linguists, drawing on the fundamental knowledge they are acquiring as they practise its use. To avoid overloading pupils' working memory, children will initially produce shorter words and phrases before tackling more complex sentences and developing automaticity.

There is nothing like the sense of accomplishment that children experience when they can confidently use a new language – even if only in the early stages; it's like unlocking a secret code or gaining a whole new form of communication. The domain of 'intercultural understanding' within the curriculum also offers pupils the chance to discover similarities and differences between French culture and our own, and to avoid stereotypes. We also work in partnership with the local High School to offer specific French experience days where the children immerse themselves in Francophonie and enjoy using and extending their learning. Through studying a new language, we aim for pupils to be inspired to continue such learning in future, whether in French or another language – many of our children have lived abroad with the military, and we want to open their minds to the prospects of further travels in their future.

### RE CURRICULUM DESIGN



"SCHOOLING
DEPRIVED OF
RELIGIOUS
INSIGHTS IS
WRETCHED
EDUCATION"
- RUSSELL KIRK



KNOWING



**BECOMING** 



**FEELING** 



Religious Education explores big questions about life - studying what people believe and what difference this makes to how they live. Through this, pupils can make sense of religions and worldviews and reflect on their own ideas and ways of living. In R.E pupils will study different aspects of religions and non-religions, including their significance and impact. Children will be equipped with the skills to engage seriously with these issues and to look at how we learn about faiths. We follow the agreed North Yorkshire syllabus with children studying Christianity in each key stage, with the addition of Judaism and Islam in KS1 along with Hinduism and non-religious worldviews in KS2 - introducing new content as pupils get older.

Pupils will acquire knowledge about the beliefs, values and traditions followed by people who practice Christianity, Islam, Hinduism, and Judaism through 3 key domains: believing, expressing and living. These aspects form the substantive knowledge and understanding that pupils study across the range of religions and worldviews – considering artefacts, places of worship, vocabulary, stories, rituals and concepts. During the study of different faiths, we will describe, explain and analyse beliefs and practices - recognising the diversity which exists within and between communities and amongst individuals. Doing so allows children to learn the disciplinary knowledge of RE – including the suitability of ways in which they can learn more about religions and how to avoid misconceptions. The knowledge of different faiths will be acquired through teacher led enquiry-based learning where pupils will identify, investigate and respond to both the questions posed, and responses offered, by some of the sources of wisdom found in different religions and worldviews.

By developing knowledge of different faiths, values and beliefs pupils will become aware of the diverse community that they are part of locally and, even more so, nationally and globally. We will draw upon our pupils' experiences of mobility and the fact many of our children will have lived abroad and in different parts of the UK. As pupils develop understanding of those with different religions, they will be encouraged to reflect on their own worldviews - developing their own religious beliefs, values and personal knowledge. We do not expect all pupils to follow or practice a faith, but we do want our children to become people who are confident to articulate their personal beliefs and opinions, whilst showing awareness, tolerance and mutual respect to those with differing views.

Pupils will be invited to respond to something of the awe and wonder linked to religious expression and experience. Children will have the opportunity to visit places of worship and explore their own responses and feelings towards these and other aspects of world religions. Pupils will learn to weigh up the value of wisdom from different sources to develop and express their insights. They will be given scope to express their diverse opinions and feelings, recognising that some aspects of religions can be contentious or complex (e.g. the concept of grace in Christianity). This offers children the chance to develop a dialogue so that they can positively participate in our society with its diverse religions and worldviews. Pupils will also learn about how people of different faiths experience emotion linked to certain festivals or times – for example the anticipation of Advent, the celebration of love in Holi or the reflection and solemnity of Yom Kippur.