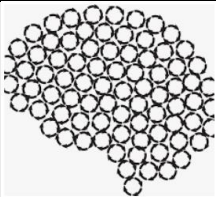
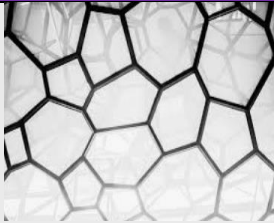
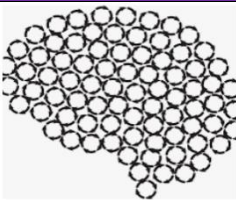


Principle 1: Foundational and Powerful Knowledge The curriculum secures the essential knowledge and language that enable all pupils to access, understand and succeed in future learning.	Principle 2: Curriculum Coherence Knowledge is deliberately structured, sequenced and connected so that pupils build meaning over time and experience the curriculum as a coherent whole.	Principle 3: Curriculum Progression The curriculum is planned as a clear progression of knowledge and thinking, building towards ambitious end points over time.	Principle 4: How Pupils Learn – A Curriculum Designed for Memory, Fluency and Mastery The curriculum is designed so that knowledge is remembered, practised and applied with increasing fluency, enabling pupils to think, create and communicate with confidence.
 Pupils build secure foundations over time, developing the knowledge and fluency they need to think, communicate and engage with increasingly complex ideas.	 Pupils encounter knowledge in a carefully considered sequence that enables them to connect ideas, deepen understanding and make sense of what they learn.	 Pupils deepen and refine their understanding as they revisit and extend key ideas, developing increasing precision, complexity and independence.	 Pupils use what they know with confidence, thinking, explaining and creating with clarity as knowledge becomes secure, fluent and mastered.
Strong foundations for all Secure foundations begin early and underpin later success. Where gaps in knowledge persist, these can accumulate and limit access to more complex learning; addressing this early is central to curriculum design. Pupils develop the language, literacy, numeracy and essential knowledge that enable them to access and succeed in increasingly complex content across the curriculum. Across all phases, teachers prioritise the knowledge pupils must secure first so that gaps do not widen and subsequent learning is not limited. in their learning. There is a relentless focus on ensuring all pupils, particularly those who are disadvantaged and those with SEND, secure the foundational knowledge that enables future success. Powerful knowledge entitlement The curriculum identifies and prioritises the core knowledge that all pupils are entitled to learn. This knowledge represents the most important content within each subject and phase and is selected because it enables pupils to understand the world and access future learning. Powerful knowledge is organised and taught so that pupils build increasingly complex mental models (schema), enabling them to connect ideas and use prior knowledge to understand new content. It is specified clearly, taught explicitly and revisited so that it becomes secure and useable. Knowledge, language and skills Foundational knowledge includes the language, fluency and skills that enable pupils to think, communicate and apply what they know. Pupils learn to read with understanding, speak with clarity, write with precision and use number with confidence. Oracy is prioritised so that pupils can articulate ideas, explain thinking and use subject specific/tier 3 vocabulary with confidence. These are part of what it means to know something, and how pupils explain, apply and communicate their understanding. Pupils engage with increasingly complex and high-quality texts that support the development of knowledge, vocabulary and disciplinary understanding. Threshold concepts and disciplinary foundations Teachers identify the key concepts and ways of thinking within each subject that pupils must grasp in order to make progress. These are introduced early, revisited frequently and deepened over time so that pupils can access more complex knowledge and think with increasing expertise. This secure knowledge base underpins disciplinary literacy and ways of thinking within each subject, enabling pupils to communicate and think as subject experts. Breadth, richness and cultural capital The curriculum provides a broad and rich body of knowledge that extends beyond pupils’ everyday experiences. Through high-quality texts, ideas and experiences, pupils encounter diverse perspectives that deepen understanding, build curiosity and expand what they see as possible. Ambition and inclusion The curriculum is an entitlement for <i>all</i> pupils. Timely adaptations support all pupils to access the ambitious curriculum. Gaps are identified and addressed so that no pupil is excluded from future success.	Clear curriculum intent Curriculum design is underpinned by clarity about what pupils will learn, why it matters and why it is taught at that point. Leaders and teachers are able to articulate the key knowledge within each subject and how it contributes to pupils’ cumulative understanding, year on year, ensuring an ambitious curriculum aligned with, and at least as demanding as the national curriculum. Deliberate sequencing Knowledge is sequenced so that pupils build understanding progressively. Content is ordered to ensure that what pupils learn first enables them to understand what comes next. The curriculum is structured to help pupils build schema by connecting new knowledge to what they already know. Sequencing is not about teaching the easiest content first, but about the intentional ordering of knowledge so that pupils can build understanding, make connections and deepen learning: the intentional structuring of knowledge so that learning builds securely over time. Sequencing is informed not only by subject logic but by how pupils learn, ensuring that content is ordered to support retention, recall and the gradual strengthening of knowledge over time. Connected knowledge Pupils learn by making connections between ideas. Curriculum design makes these links explicit so that new learning builds on what has been taught before. Key concepts are revisited in different contexts, enabling pupils to strengthen and deepen their understanding over time. Teachers make connections explicit so that pupils actively link new learning to prior knowledge, strengthening their mental models and supporting long-term retention. Curriculum as a coherent whole The curriculum is designed as more than a series of topics or units. Within and across subjects, knowledge is organised so that pupils experience learning as connected and meaningful, rather than fragmented or isolated. Curiosity, meaning and engagement A coherent curriculum enables pupils to engage with meaningful knowledge that prompts curiosity and purposeful thinking. Carefully selected content, texts and experiences help pupils ask questions, explore ideas and deepen their understanding of the world. Consistency and clarity across phases Curriculum coherence is secured across classes, year groups and phases. There is shared clarity about the structure and sequencing of knowledge so that pupils experience continuity in their learning as they move through the curriculum.	Ambitious end points Curriculum planning is anchored in clearly defined end points which set out what pupils should know, understand and be able to do at key stages. These end points reflect the most important knowledge and disciplinary thinking within each subject and ensure that learning is purposeful, coherent and academically ambitious. Progression over time Knowledge is sequenced so that pupils build from simple to complex understanding. Learning is structured to return to key concepts, enabling pupils to deepen, connect and refine their knowledge rather than encounter it in isolation. Mastery is reflected in pupils’ ability to use knowledge fluently, independently and accurately over time. Cumulative understanding Progression is not a series of disconnected steps, but a cumulative process in which new learning builds on prior knowledge. Pupils strengthen and extend their understanding over time, developing the capacity to apply knowledge flexibly in different contexts. Progress is reflected in pupils’ ability to know more, remember more and use this knowledge with increasing fluency and independence over time. Deepening disciplinary thinking As pupils progress, they think with increasing precision and sophistication within each subject. They learn to use evidence, explain ideas, make connections and reason effectively, developing the habits of mind that define each discipline. Clarity of expectations Teachers and pupils have a clear understanding of what success looks like at each stage. Curriculum resources/tools make explicit the knowledge and understanding pupils are expected to secure, ensuring consistency, coherence and high expectations across classes, years and phases. Curriculum plans, such as knowledge organisers or concept maps, make this progression visible, helping pupils and teachers understand how learning builds over time. Ambitious and Inclusive for all All pupils are supported to make strong progress through the curriculum. The ambition of the end point remains the same, with adaptative teaching (anticipating barriers, adjusting explanations, modelling and scaffolds and providing different levels of support) and responsive teaching (adjusting teaching in response to evidence gathered) used to ensure that all pupils secure the knowledge needed to move forward successfully.	Learning that lasts Curriculum design prioritises securing knowledge in long-term memory. Pupils regularly revisit and recall previously taught content so that it becomes secure and readily available. Practice is built deliberately over time so that pupils do not simply encounter knowledge, but retain and use it. This design reflects how learning occurs: new knowledge is processed within limited working memory and strengthened through repeated retrieval until it becomes embedded in long-term memory. Pupils are supported to monitor their understanding and retrieve strategies, strengthening both memory and metacognitive awareness over time. Practice for fluency, application and consolidation Pupils are given frequent opportunities to practise what they know so that knowledge becomes fluent and useable. Practice enables pupils to move from effortful recall to confident application, supporting them to think more deeply and apply knowledge in new and increasingly complex contexts. Structured talk supports pupils to rehearse, refine and express their understanding as knowledge becomes secure. Practice is spaced and revisited over time, sometimes interleaving content, so that pupils strengthen recall and apply knowledge in different contexts. Teachers encourage pupils to apply effort to practise and apply new knowledge to increasingly complex scenarios, ‘out of context’ situations and out-of-sequence tasks that are built on the concept of spaced practice. Purposeful task design Tasks are carefully designed to make thinking visible and deepen understanding. High-quality tasks require pupils to explain, connect, justify, compare and apply their knowledge rather than complete superficial activity. Task design is purposeful and intentional, ensuring that pupils engage deeply with knowledge rather than simply completing tasks. Teachers use explanation, modelling and carefully designed scaffolds to make complex thinking visible, gradually removing support as pupils gain independence. Reading, talk and expression Reading, talk and writing are central to how pupils learn the curriculum. High-quality texts provide the knowledge, language and context needed for deeper thinking. Structured talk enables pupils to explore ideas, clarify understanding and use subject vocabulary with precision. Pupils master disciplinary literacy and are supported to express their understanding clearly and confidently across different forms. Thinking, creativity and innovation Pupils are expected to think hard about the curriculum. Through carefully designed tasks and rich content, they are encouraged to question, explore ideas, make connections and consider alternative perspectives. Creativity is rooted in secure knowledge, enabling pupils to apply what they know in original and meaningful ways. Self-regulation and metacognition Expert learners are able to review and regulate their own learning, determine their own goals and gaps, then plan how to improve through self-study. It is not enough for teachers to own the knowledge checking process- e.g. always setting quiz questions. Pupils learn how to self-study and revise using strategies from cognitive science. There is timely support for pupils who have gaps in understanding (i.e. knowing how ideas connect) or memory (failing to retain). Clarity through enactment The enacted curriculum - the work pupils produce and the thinking they can articulate - reflects the intended curriculum. Teachers use responsive teaching, questioning and checking to ensure that pupils are learning, remembering and applying what has been taught, and to address misconceptions as they arise.

Principle 1: Powerful Knowledge <i>Knowledge matters: the concept of a knowledge-rich curriculum.</i>	Principle 2: Curriculum Coherence <i>How learning is structured/ sequenced to fit together in a logical way, allowing connections to unify components into a body of knowledge?</i>	Principle 3: The Progress Model <i>The curriculum is a progression model which is planned to meet learning needs for all students. A progress model measures progress in terms of knowledge gained (and retained).</i>	Principle 4: How students learn <i>The role of cognitive science in the curriculum is important to make learning stick- the curriculum is successfully implemented so that students successfully learn the curriculum.</i>
 E.D. Hirsch <i>Why Knowledge Matters. Young Powerful Knowledge as a Curriculum Principle.</i> In <i>Knowledge and the Future School: Curriculum and Social Justice</i>	 Myatt <i>Building Curriculum Coherence</i> (Impact Journal) and <i>The Curriculum: From Gallimaufry to Coherence</i> Howard and Hill <i>Symbiosis: The Curriculum and the Classroom</i>	 Fordham <i>What did I mean by ‘the curriculum is the progression model’?</i> Didau <i>How do we know pupils are making progress: the curriculum</i> Sealy and Bennett <i>The ResearchED Guide to the Curriculum</i>	 Howard and Hill <i>Symbiosis: The Curriculum and the Classroom</i> Willingham <i>Make it Stick: The Science of Successful Learning</i> Deans for Impact: ‘The Science of Learning’ Rosenshine <i>Principles of Instruction</i>
Why is knowledge important? It is impossible to think without knowledge and the more knowledge students have, the more they can think. Knowledge begets knowledge- knowledge is generative and so when you have secure knowledge, it enables you to ‘add on’ and acquire more knowledge. Knowledge acts as its own gravity; the more one has the easier it is to understand new things and to retrieve them. Schema theory and the idea of building interconnected webs of knowledge is central to building a knowledge-rich curriculum. Links and connections should be made explicit. The curriculum is a narrative. What is powerful knowledge? The best knowledge that we have in each subject that all students should know. This is specialised, expert knowledge within each subject which enables students to interpret and control the world. (“Best that has been thought and said.”) Students learn and revisit the key concepts in each discipline. Threshold concepts form the basis of all knowledge encounters, unlocking the next stage of learning and understanding. Threshold concepts are the bits of the curriculum that make the next stage possible (“a proximal function”) but they also connect together to achieve an enduring job: mastery of the discipline (“the ultimate function”). Deep knowledge: Deepening knowledge is possible through vocabulary learning, as a result of explicit vocabulary instruction. The issue of cumulative dysfluency (where students accumulate gaps which then limits their ability to develop complex understanding).	Curriculum design should not be reduced into disconnected “fragments of knowledge [that] float around without being placed into a coherent structure.” (Myatt 2018) In a coherent curriculum, explicit links are made between the different components of learning across the subject. There is thought and consideration into sequencing between components of knowledge that then leads to ultimate conceptual understanding. When a curriculum is taught in a coherent way, students are able to become expert learners in that subject and appreciate the subject as having an interconnected body of knowledge. Connections to prior learning are always explicit. Sequencing- this is the order which you set out, where students “encounter the curriculum.” (Didau) Content is sequenced to ensure that components of knowledge lead to conceptual understanding. Ordering learning to aid retention, memory and mastery.	There is a model of progression for all subjects and curriculum planning ensures sufficient coverage, depth and breadth of learning. The curriculum is a progress model and should reflect the ‘best route’ for expert learning. The subject curriculum is appropriately challenging for the students that it serves. The curriculum has clear and ambitious end points. Clear intent within each discipline- “what you expect students to know by certain points in their life.” (Spielman) Both teachers and learners should have sharp clarity on the learning expectations for every year/ term. The curriculum works as a whole and there is clarity of how each part of the curriculum fits into the whole. This is also the case for “non-benchmark” years where there are no terminal examinations, for instance. By being explicit about the precise areas of knowledge you want students to secure at each point in their curriculum journey, it makes it easier to plan a curriculum that builds on prior learning. Students make strong progress from their relative starting points and the curriculum continues to provide access to sufficient depth and breadth of knowledge to secure subsequent success. We operate on the belief that all learners can learn the important content and reach mastery within our subject disciplines- an inclusive and ambitious curriculum.	Just because you’ve taught it, doesn’t mean students have learned it! If content is not in a student’s long-term memory then it has not been learned. The curriculum should be designed with cognitive science in mind to make learning durable (to make learning last). We do not have direct access to students’ brains and teaching is not a process of transmission of knowledge- students develop a relationship with knowledge, not just for memorisation but to apply expert knowledge to think or act in different ways and to learn more/ know more. The working memory processes new learning but it can’t cope with too much information at once, so knowledge should be chunked. The long-term memory is infinite and once knowledge has become embedded, it is transferred here. Retrieval practice strengthens the ability to recall knowledge from the long-term memory. Concept of the “enacted curriculum”- students should be provided with the opportunities to “learn the curriculum” and not just encounter it. The enacted curriculum can be seen through products of the curriculum such as students’ work and student voice, which reflect security of knowledge and a build-up of skills/ expertise. Learning is invisible and it isn’t linear- progress doesn’t happen in a straight line because learning is forgotten, retrieved and strengthened again, as per the Ebbinghaus forgetting curve. It is spaced repetition over time with constant retrieval that makes learning stick. Practice: Opportunities for pupils to practise what they know – so they deepen their understanding in a discipline – is built into the curriculum. E.g. there is regular, repeated exposure to practise retrieval of what has previously been taught; purposefully practise a particular skill to build mastery; deepen understanding through applying learning to alternative contexts to develop as expert learners. Spaced practice can be used to rehearse particular knowledge retrieval over a period of time (i.e. block learning and repeat practice over time). Interleaving can be used to mix practice of knowledge retrieval over time (i.e. not AAABBBCCC, but ABCABCABC). Retrieval practice involves recalling something you have learned in the past and bringing it back to mind- this strengthens memory. Self-regulation is the sign of a master, expert learner.