PRIMARY CUSP CURRICULUM WITH UNITY SCHOOLS PARTNERSHIP SCIENCE

...in five minutes.

The CUSP Science curriculum is built on a **concentric** and **cumulative** model. This means that we have deliberately positioned complex concepts and content to be revisited, so secure foundations can be built. We focus on the three domains in Science – Biology, Physics and Chemistry These domains are **introduced and connected** in lessons to build coherent schema P5 of the Science Handbook	We define knowledge as being substantive and disciplinary. **Substantive knowledge** is the subject knowledge and explicit vocabulary used to learn about the content. **Disciplinary knowledge** (working scientifically) is knowing how to collect, use, interpret, understand and evaluate the evidence from scientific processes. P6 of the Science Handbook	The **learning sequence** in each block has essential and enrichment knowledge identified against each learning question. Literature and writing opportunities are connected where appropriate. **Flexible blocks** also appear in the long-term sequence, where additional time can be used to further enrich content or consolidate and revisit foundational knowledge that needs securing. P11 and 64 of the Science Handbook **CUSP Big Ideas** are exposed, connected and reflected in the science curriculum. CUSP Core > Big Ideas	**Strong Start** Blocks support teachers to introduce specific procedural and working scientifically knowledge in advance of pupils using it to help deepen their understanding of the substantive knowledge. P61 of the Science Handbook **Reference lesson** Blocks support teachers to ensure pupils all start from a similar point of understanding. This can be used in a single age or mixed age sequence. P62 of the Science Handbook	Each year group has clear **cumulative end goals** – these are identified P13 – 18 of the Science Handbook Each science block identifies the core **foundational knowledge** pupils are to learn. **Disciplinary knowledge and** opportunities are mapped across the curriculum to a granular depth with learning questions in blocks identifying the precise skill pupils will apply. P1 – 8 CUSP Science Disciplinary Knowledge
We use the **6 phases of a CUSP lesson** in Science lessons. • Connect • Explain (inc. EVI) • Example • Attempt • Apply • Challenge Pupils use **Knowledge Notes** to help them navigate the lesson. Opportunities for high-quality oracy are built throughout the sequence. **Socrative Quizzing** is used for retrieval practice as a knowledge check. P80 of the Science Handbook	**Explicit Vocabulary Instruction** is built into every lesson. Threshold words are taught and applied across studies. **Oracy opportunities** are built into the six phases of a lesson. Scientific dialogue, discussion and rehearsal is a key element of **thinking hard**. **Digital Thinking Hard Tasks** enable all pupils to attempt and make sense of the content through deliberate practice. P81 of the Science Handbook	Careful thought has been given to how to ensure that all pupils can thrive in lesson. Our **Scaffolding Toolkit** suggests 10 strategies that teachers can deploy to support pupils. Editable **Securing and Advancing** Knowledge Notes allow teachers to make deliberate choices to maintain high ambition whilst scaffolding up for SEND or disadvantaged pupils if needed.	*Use an example of a unit that you know well to talk through. You can see:* • Knowledge Organisers (minimum expectation of study) and Knowledge Notes (physical, locational cues to overcome the transience and split attention effect) • Disciplinary Knowledge map to identify reach and range of opportunities – provide examples from books alongside the map • The key vocabulary that will be taught • P88 of the Science Handbook	*Share an example of a pupils' Science book. You can see:* • The use of double page spreads • How KNs are used • How scaffolding strategies are used • How pupils use key vocabulary in their responses Share a pupils' Science / Reading / Writing book. You can see how pupils make connections between what they are learning in Science and what they are learning in Reading and Writing.