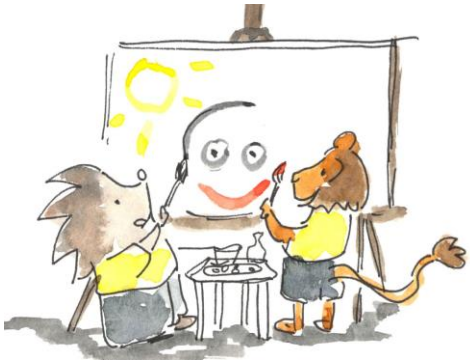
Hamilton Curriculum

Our curriculum is designed to cover the National Curriculum for England and Wales (2013) https://www.gov.uk/government/collections/national-curriculum. Our pedagogy works on the basis that structured, lively and interactive **teaching** stimulates **learning activities**, often practical or investigational, which lead on to **skills practice** and rehearsal. We base our curriculum and its related pedagogy on solid educational principles, underpinned by an in-depth understanding of the work of Piaget, Vygotsky and Bruner.

I hear and I forget,
I see and I remember,
I do and I understand.



All subjects have an emphasis on investigation, enquiry and practical activity. Children are stimulated to learn through interesting, even inspirational, texts and hands-on experiences which draw on their existing knowledge and skills. The importance of generating understanding, as opposed to rote-learning, runs throughout our curriculum like a golden thread, but neither do we underestimate the critical role of memorisation.

Mathematics

Maths Blocks provide a wide spiral curriculum (cf Bruner), allowing children to revisit each topic within a fairly short time span. This ensures that confidence is boosted by regular encounters with a specific skill or concept, and also that there is not the exasperating need for re-teaching when children have forgotten something taught some while ago.
Our curriculum coverage is structured into:

- **Blocks of coherent content** – the curriculum is broken into blocks: each one is composed of a small number of units covering one or more related skills.
- **Teaching for understanding** – detailed teaching documents give pedagogical advice and ensure consistency in the use of models and images to cement understanding.
- **Slide presentations** – ready-to-use starters, step-by-step teaching input, practice sheets and mastery questions are all in one place ready. Practical activities are signalled on the slides so that children continue to learn by doing.
- **Group activities** – guided or independent; differentiated at three levels, to foster mathematical discussion and development of vocabulary.
- **Procedural fluency** – practice worksheets, differentiated at three levels.
- **Reasoning questions** –allow you to assess children's understanding at all points.
- **Investigative activities** – applying learning through 'low floor-high ceiling' problem solving develops children's ability to collaborate, enquire systematically and think mathematically.
- **Mental/oral starters** – quick preliminary activities facilitate the practice of skills required for the day's lesson or those needing to be kept 'on-the-boil'.
- **Extra support** – small-group activities to do with an adult for children who struggle.
- **Common Misconceptions** – information to help teachers and helpers understand and avoid potential pitfalls and provide a quick reminder of correct vocabulary.

English

When paired alongside a handwriting policy and a spelling scheme, Hamilton provides full coverage of the English National Curriculum. Different aspects of the five curriculum areas: (i) Reading – word level, (ii) Reading – comprehension, (iii) Writing – transcription, (iv) Writing – Composition and (v) Vocabulary, Grammar and Punctuation are all addressed in every block; the pedagogical approach integrates the teaching of these five areas.

Flexibility is key to good teaching in English; therefore, the materials are presented so as to allow maximum choice. Teachers can then tailor their teaching not only to their particular class but also to their own preferences and interests. This subject is best taught when teachers love the texts they use, so that they can speak passionately and engage with the written and spoken words being used to stimulate reading, writing and – crucially – speaking and listening.

Our English curriculum is structured into a number of blocks of learning to provide the essential teacher-choice. Each block has a number of units, which can be taught as stand-alone items or in any combination with other units in that block. The whole set together incorporates comprehension, spelling and the teaching of grammar and punctuation, all stimulated by the same core text and all culminating in a piece of extended writing to consolidate learning.

The core unit is at the heart of the plan. It introduces the genre, its features and the key text(s). In this starter unit, there is a focus on comprehension, speaking and listening. Subsequent units build on this foundation and extend it, so that teachers may choose units focussed on:

- **Comprehension**, including word reading and further in-depth comprehension activities, textual analysis and meaning making. Most KS1 and some KS2 units include a Group Reader in the resources. These simple and engaging texts can be projected or printed and are pitched at a reading level accessible to most children in the class. This helps ensure that reading is central to children's learning.
- **Grammar and punctuation**, providing rigorous, integrated, purposeful and fun activities to teach these aspects of the English curriculum. Many units include appealing and clear PowerPoint presentations for teaching grammar. (These are also useful to refresh teachers' own subject knowledge.)
  There is a balance of explicit teaching, focused activities and the application of what has been learned in the meaningful context of children's own writing.
- **Composition** - the last unit in a block comprises an extended writing activity. It provides opportunities for children to secure the learning from the other units and gives a purpose to this learning by grounding it in written expression. Transcription skills such as handwriting and spelling are also covered.

No unit is completely 'pure'. There is a strong focus, but often other elements of English teaching are included. Our experience of English language is not 'pure', and the best learning happens when it is purposeful and in context. Teachers cover the curriculum by choosing the blocks, then selecting the units which address the specific needs and requirements of the children in their class. Teacher notes appear on the front page of all unit planning documents to support this flexibility.

Science

Hamilton's science curriculum is designed to provide a complete and comprehensive coverage of the Science National Curriculum in England and Wales.

Our science planning is grouped in blocks, each of which comprises six-weeks of teaching and learning. The sessions can be taught flexibly - perhaps once a week or perhaps in a more concentrated format over a much shorter timeframe. The materials are structured as follows:

- **Each Block of Science** covers content in a specified scientific topic. It is comprehensive and rigorous, and culminates in meaningful outcomes that provide motivation and summative learning.
- **Each session** comes with relevant textual and visual resources ready for printing or ready to show on your interactive white board. Where useful, there are ready-made slide presentations in PowerPoint format for use with any system.
- **A Year Overview** summarises the coverage of the year's National Curriculum for England science objectives and the key science activities in each block. It also highlights extended writing opportunities.
- **An Assessment Grid** is a clearly laid out table to enable teachers to track the progress of each child in their class against the complete list of the year's National Curriculum for England science objectives.
- **The Block Overview** lays out all of the activities for each of the sessions. It specifies the science objectives and also other subject objectives that are covered in the block. There is also a list of required resources, including both those provided by Hamilton and those teachers will need to source themselves.

Additional science curriculum support

For the blocks for Infants (children aged 5-7) we provide a list of the key knowledge and concepts that children should gain through the sessions in that block.

For the blocks for juniors (children aged 7-11) we provide in-depth teacher background, so that teachers quickly consolidate their own subject knowledge. These have been put together by a scientist who specialises in communicating science to non-experts. These documents point you to reliable websites for more information and also summarise the key knowledge and concepts children should gain from the block.

Cross-Curricular Topics

Hamilton's topics are designed to provide flexible planning to be used as intensive or extended cross-curricular study over a range of subjects. Some focus heavily on history or geography, while others are more wide-ranging, incorporating National Curriculum for England objectives in design and technology, art, music, dance, science, PSHE, PE as well as English and maths.
Each topic comes with a **topic overview**. This provides a summary of the learning activities and the key National Curriculum goals that will be covered within the topic, and within each individual block, enabling the process of selection. Each school's long-term planning for each subject allows teachers to select individual topics each year to fit the requirements of their own particular curriculum.