



Intent

The curriculum at Ling Moor Primary Academy is aligned to the vision of the Priory Federation of Academies and driven by our passion to empower potential, in order to improve the life chances of pupils so they become citizens of the world.

It is designed to encourage the development of the Priory values: wisdom, curiosity, generosity, courage and passion alongside meeting the specific needs of our community. Pupils study the full curriculum as exemplified by the National Curriculum. The curriculum at Ling Moor is designed to ensure that all children have the academic and social aspiration to be true citizens of the world. Key drivers of the curriculum are aspiration, academic opportunity, appreciation of diversity and understanding of their impact upon the world.

There are four clear strands to our curriculum:

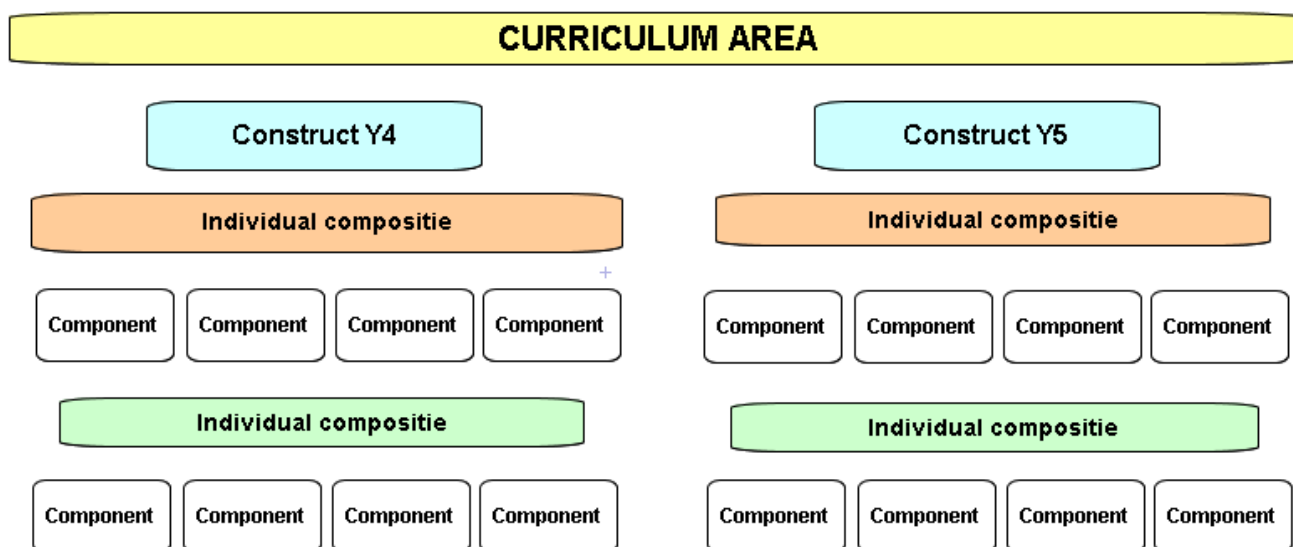
- Children develop the skills to be a life-long learner enabling them to be successful in the next stages of their education and the confidence to become citizens of the world – A Ling Moor Learner. *They have curiosity, courage and passion.*
- Children understand what it means to contribute to the success of a community – The Ling Moor Family. Their participation in community empowers them with British values and is rooted in Spiritual, Moral, Social and Cultural responsibility. *They are generous.*
- Children develop a skills and knowledge base fitting of a broad and balanced curriculum. This empowers them with the knowledge and skills to be successful. *They have curiosity and wisdom.*
- Children develop a core English and Mathematical set of skills resulting in a depth and security of mathematical and linguistic concepts. *They have curiosity and wisdom.*

Our Design and Technology curriculum ensures that children are designers and creators. They will have:

- Significant levels of originality and the willingness to take creative risks to produce innovative ideas and prototypes.
- An excellent attitude to learning and independent working.
- The ability to use time efficiently and work constructively and productively with others.
- The ability to carry out thorough research, show initiative and ask questions to develop an exceptionally detailed knowledge of users' needs.
- The ability to act as responsible designers and makers, working ethically, using finite materials carefully and working safely.
- A thorough knowledge of which tools, equipment and materials to use to make their products.
- The ability to apply mathematical knowledge.
- The ability to manage risks exceptionally well to manufacture products safely and hygienically.
- A passion for the subject and knowledge of, up-to-date technological innovations in materials, products and systems.

Implementation

The curriculum is underpinned by clear constructs that are the pillars of the curriculum area. Each construct is made of multiple composites (the key areas of knowledge and the key areas of skills each child will need to learn in order to master that strand of the curriculum). The knowledge and key areas of skill are listed as the key curriculum components.



The curriculum is carefully planned and sequenced to ensure that children develop a secure knowledge base through opportunities to retrieve key knowledge. A simple sequence of retrieval practise: fluency (basic questions), reasoning/problem solving (advanced questions) and elaboration (deeper questions) should exist in all learning.

The constructs, composites and components that provide the Long Term Learning Structure for Design and Technology are included within this document.

Teaching of design and technology follows a design process alongside the opportunities to learn and apply practical skills.

Our D&T curriculum design is based on evidence from cognitive science; three main principles underpin it:

- 1) learning is most effective with spaced repetition.
 - 2) Interleaving helps pupils to discriminate between topics and aids long-term retention.
 - 3) Retrieval of previously learned content is frequent and regular, which increases both storage and retrieval strength.
- In addition to the three principles we also understand that learning is invisible in the short-term and that sustained mastery takes time. Some of our content is subject specific, whilst other content is combined in a cross-curricular approach. Continuous provision, in the form of daily routines, replaces the teaching of some aspects of the curriculum and, in other cases, provides retrieval practise for previously learned content

Impact

As designers and creators, at the end of each Milestone, the vast majority of pupils have sustained mastery of the content, that is, they remember it all and are fluent in it; some pupils have a greater depth of understanding.