

Curriculum Subject: Design Technology

Equity

Intent

At Woodford, we see Design Technology as vital to support children to develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. In lessons, the children will build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users. In every unit, they will critique, evaluate and test their ideas and products and the work of others. Moreover, we also aim to give our pupils chance to take risks within a safe environment, making products that solve real and relevant problems within a variety of contexts. The areas that are covered across the key stages are cooking and nutrition, structures, mechanisms, electrical and mechanical systems, the digital world and textiles. Design Technology allows great opportunities to make links to learning in Mathematics, Science, Engineering, Computing and Art.

Expectations

- 3 step approach to each unit of Design Technology using the Plan, Do, Review model
- Use of Kapow scheme showing clear progression of knowledge and skills throughout the school.
- Research and develop design criteria to solve real and relevant problems
- Critiquing, evaluating and testing ideas and products and the work of others
- Show consideration to their own and others' needs, wants and values
- Retrieval of prior knowledge
- Understand and apply the principles of nutrition and learn how to cook

Opportunities

- Use a range of tools and equipment
- Work with various materials and components
- Take risks
- Create prototype products.
- Links to current affairs
- Consider key events and individuals .
- Parent open afternoons to share learning
- Positive noticing
- Use of computing software. to program, monitor and control their products
- Collaboration

Adaptations

- Widgit symbols.
- Cloze procedures.
- Pre-teach vocabulary.
- Symbols.
- Vocabulary mats.
- Consistency in approaches across the subject and across the school.
- Additional support in practical lessons to comply with H & S guidelines
- Personal, actionable feedback.

Social Structures

- Meet and greet to positively start each lesson.
- Talk partners.
- Shared discussion.
- Choral rehearsal of vocabulary.
- Answering in more detail ('tell me more', Say it in a different way).
- 3, 2, 1 Retrieval

Diversity

At Woodford we understand the importance of diversity. Our curriculum is underpinned by the British values and ensuring our pupils are well rounded individuals who will impact positively on society. Mutual Respect - Respect of who we are designing for or working together with is important along with respect for existing designers, products and ideas. Democracy - Make design decisions together and prevent bias . Consider others designers views and opinions. Individual Liberty - allows a designer to make design decisions and maintain their individuality.

Vocabulary

We prioritise the teaching of vocabulary as a core component to build children's knowledge.. We use schema maps to promote vocabulary and connect knowledge to build scheme in the long-term memory. The use of high-quality demonstration videos help to build technical vocabulary and make links with previous learning.

CURRICULUM DELIVERY			
Grow the potential for all children - children secure new knowledge and achieve. Enact the planned curriculum content.			
	Consistent Approach	Common Language	Teacher/TA Role
Entry	Ready for learning. • Meet and greet/welcome • Calm and silent • Magnet eyes • Prepared (equipment, pre-teach)	Positive Calm 'Ready to learn.' '1, 2, 3'	Meet and greet. Set expectations for learning.
Starter	Review/Retrieval of knowledge. Set the purpose for new learning to connect schema (know, do remember).	Knowledge Retrieval Knowledge quizzes	Check knowledge. Connect schema. Assessment.
Teacher instruction (I do)	Specify and define new vocabulary. Narrated modelling to demonstrate new knowledge. Questioning to deepen thinking of concept/new knowledge. High-quality collaborative learner talk.	Narrated modelling Vocabulary Questioning Thinking Cold Calling Oral rehearsal 'MITY' 'TYP' 'Magnet eyes' 'Choral wave'	Direct instruction. Model and explain new knowledge. Circle the room. Listen to discussion. Give feedback. Question understanding.
Guided Practice (We do)	Exploring the idea in small steps to allow learners to master the concept and connect the schema. High-quality collaborative learner talk. High-quality talk around exemplars of excellence. Scaffolding support to adapt access for children to progress with knowledge content. Assessment for learning.	Components Connections Scaffold Small steps 8 Talk Moves Choral responses 'Do it, do it again, do it yet again.' 'Say it again better' 'MITY' 'TYP'	Listen to discussion. Address misconceptions. Circle the room. Live feedback. Question.
Deliberate independent Practice (You do)	Independent 'overlearning' to secure concept to long-term memory. Scaffolding support to adapt access for children to progress with knowledge content. Questioning to assess how well the new knowledge has been secured. Live feedback to address misconceptions and deepen thinking.	Overlearning Applying Questioning Independent practice Silent practice Focused feedback 'Show what you know.' 'Do it, do it again, do it yet again.'	Address misconceptions. Live action feedback. Circle the room. Targeted support. Responsive teaching. Adaptive scaffolds.
Exit	Review/Retrieval of new knowledge. Assessment as learning.	Knowledge quizzes Synoptic tasks Progress measure 'Tell me what you have understood.'	Check knowledge. How well have all children secured curriculum content?

All children included in learning and have access to the curriculum content ~ Equity.
All children secure new knowledge and progress with learning.

All children included in learning and have access to the curriculum content through their needs being met. All children secure new knowledge and progress with learning.