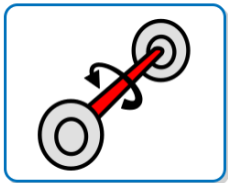


To ensure that our intent transfers into everyday classroom practice, our pedagogy and subject specific CPD is based on the Rosenshine Principles (incorporated within Plymouth CAST Principles Teaching and Learning) and Ebbinghaus' Forgetting Curve theory. This ensures that subject content is expertly delivered. We also deliver individualised coaching to all teachers to continually improve our practice.

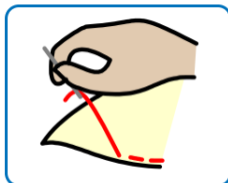
Core concepts in Design Technology

Mechanisms



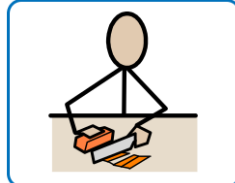
Use levers, pulleys, wheels and pneumatics to help things move and make work easier.

Textiles



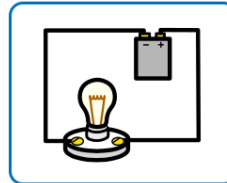
Design and create fabric items like puppets or cushions using basic stitching techniques.

Food



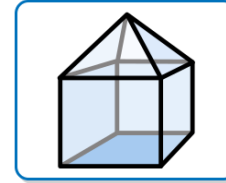
Preparing food and simple, healthy meals safely and hygienically.

Electrical Systems



Using basic circuits to create usable objects and games.

Structures



Building models to understand how shapes and joins can make structures strong.

Digital World



Using digital tools to design and control models or solve problems using simple programming.

The curriculum is mapped using these core concepts. We plan for progression using the structure outlined in the impact section below. Lesson content is planned towards these progression points and follows the model of direct instruction, shared and modelled practice before culminating in independent practice and mastery. Substantive knowledge is acquired through each unit of study to ensure broad and balanced coverage. This is supported by the use of vocabulary prompts and knowledge organisers, and reinforced using retrieval strategies using 'Do it Now' activities at the start of each lesson.

Lesson Timetabling

Units have a varying number of lessons but roughly equate to one discrete lesson per week. These are often taught together as a continuous week of lessons. In Early Years, children receive ongoing access to creative resources during the continuous provision.

Lesson Delivery Structure in Design Technology

Introduction	Imitate	Innovate	Independent Practice	Assessment & Reflection
<ul style="list-style-type: none">• Explore key themes and components within the technological theme• How does it work?• Real-world context	<ul style="list-style-type: none">• Practice the skills• Make a prototype	<ul style="list-style-type: none">• Design your own version	<ul style="list-style-type: none">• Make your own version	<ul style="list-style-type: none">• Evaluate the process and outcome• Discuss the Enquiry question for topic• Explore links to Big Ideas





Some of the **adaptations** we make to learning in Design Technology for pupils are as follows:

- Small step instructions with symbols or icons instead of written instructions if possible
- Provision of word mats and knowledge organisers with images, diagrams & widgets
- Adapt materials and tools
- Use templates, examples and guided questions
- Individualised learning tasks targeting the Gateway key for the unit
- Opportunities for paired talk/work
- Allow extra time where needed
- Adjust text size, contrast or background colour where needed
- Emphasise functional skills
- Emphasise roles where pupils can contribute meaningfully



We **extend** learning in Design Technology by:

- By setting challenges and open ended projects
- Encouraging pupils to make wider connections within and beyond the curriculum area
- Encouraging pupils to try out alternative materials
- Encouraging pupils to test and improve prototypes using more detailed evaluations



The Design Technology curriculum is **enriched** for all pupils through:

- Educational visits to Structures (Year 3 and Year 5)
- Learning about careers in Design Technology and how it is used in the wider world
- Tinkering Club - where pupils can explore materials freely and experiment