

Knowing More. Remembering More. Applying More!
Assessment in Foundation Subjects - Design Technology (Year 3)

Teachers to assess how well children have learned the required knowledge at the end of each term.

Working Towards (WTS) **Expected (EXS)** **Greater Depth (GDS)**

	Autumn Term- Torches	Spring Term – Food Technology (Egyptian Bread)	Summer Term – Lower school crest award
Prior skills	Make their design using appropriate techniques (year 1)	Develop their design ideas applying findings from their earlier research (year 1)	Generate ideas by drawing on their own and other people's experiences (year 2)
Substantive Key Knowledge and how it is applied	<ul style="list-style-type: none"> Know that materials have both functional properties and aesthetic qualities Think about the simple working characteristics of materials and components Links to science curriculum 	<ul style="list-style-type: none"> Know the history behind bread How do we know that bread was important to the Egyptians? Why do most cultures and countries eat bread? 	<ul style="list-style-type: none"> Describe the purpose of their products Indicate the design features of their products that will appeal to intended users Explain how particular parts of their products work
Disciplinary knowledge	<ul style="list-style-type: none"> use a wider range of materials and components than KS1, including construction materials and kits, mechanical components and electrical components measure, mark out, cut and shape materials and components with some accuracy 	<ul style="list-style-type: none"> Generate realistic designs Follow basic recipes Measure and weigh ingredients. 	<ul style="list-style-type: none"> Generate realistic ideas, focusing on the needs of the user Make design decisions that take account of the availability of resources
Key vocabulary	Purpose Plan Design Skills Evaluate Product Circuits Switch Bulb Wires Cell	Egyptian, archaeologist, flour, bread,	Purpose Plan Design Skills Evaluate Product Discussion Objective Teamwork Cooperation Pitch
Future learning	Construct a product using an electronic circuit and mechanic components (year 5)	Design a new flavour of bread.	Work within a range of contexts to overcome problems in different contexts (year 6)
Spiritual Spark	Discuss the phrase from John 1:5 “<i>the light shines in the darkness.</i>”	Why do you think that bread is consumed in every culture on an almost daily basis?	What new, innovative product could you invent?

Knowing More. Remembering More. Applying More!
Assessment in Foundation Subjects - Design Technology (Year 4)

Teachers to assess how well children have learned the required knowledge at the end of each term.

Working Towards (WTS) **Expected (EXS)** **Greater Depth (GDS)**

	Autumn Term- Roman Shields	Spring Term- Shelters	Summer Term – Bridges
Prior skills	Use joining methods to decorate a product (year 1)	Building frame structures to support weight (year 4)	Selecting materials due to their function (year 2)
Substantive Key Knowledge and how it is applied	<ul style="list-style-type: none"> Understand that materials have both functional properties and aesthetic qualities Know that a 3-D textiles product can be assembled from two identical fabric shapes Links to topic curriculum 	<ul style="list-style-type: none"> Know how to make strong, stiff shell structures Understand that materials can be combined and mixed to create more useful characteristics Realise how freestanding structures can be made stronger, stiffer and more stable 	<ul style="list-style-type: none"> Understand that materials have both functional properties and aesthetic qualities Know how freestanding structures can be made stronger, stiffer and more stable
Disciplinary knowledge	<ul style="list-style-type: none"> Measure, mark out, cut and shape materials and components with some accuracy Assemble, join and combine materials and components with some accuracy 	<ul style="list-style-type: none"> select materials and components suitable for the task explain their choice of materials and components according to functional properties and aesthetic qualities accurately measure, mark out, cut and shape materials and components 	<ul style="list-style-type: none"> Use a wider range of materials and components than KS1, including construction materials Mark , measure cut and use components with growing accuracy
Key vocabulary	Purpose Plan Design Skills Evaluate Product Insulation Conditions Practical Needle Thread Material Cutting Joining Sewing Measure	Purpose Plan Design Skills Evaluate Product Strength support Stability structure Fix Brace	Purpose Plan Design Skills Evaluate Product Strength Support Structure Brace
Future learning	Accurately, cut join and combine material for a specific purpose (year 6)	Using a larger variety of tools, mechanical and manual, to achieve a desired task (KS3)	Understand methods on stiffening and strengthening structures (year 5)
Spiritual Spark	What crest would be on your shield? What things represent you and your family?	If you were going to build a shelter anywhere in the world, where would it be?	How would you begin to ‘build a bridge’ between you and a friend that you had fallen out with?

Knowing More. Remembering More. Applying More!
Assessment in Foundation Subjects - Design Technology (Year 5)

Teachers to assess how well children have learned the required knowledge at the end of each term.

Working Towards (WTS) **Expected (EXS)** **Greater Depth (GDS)**

	Autumn Term – Viking purse	Spring Term- Electric Buggies	Summer Term – Roller coasters
Prior learning	Evaluate their own and others work based on aesthetic properties. (year 3)	How to make a battery powered torch (year 3)	Manipulating materials to create different effects by cutting, creasing and folding. (Year 4)
Substantive Key Knowledge and how it is applied	<ul style="list-style-type: none"> Understand that materials have both functional properties and aesthetic qualities Know that a 3-D textiles product can be assembled from two identical fabric shapes Links to topic curriculum 	<ul style="list-style-type: none"> Understanding of the essential characteristics of a series circuit and experience of creating a battery powered, functional, electrical product. To know and understand an electrical circuit. 	<ul style="list-style-type: none"> Understand that mechanical and electrical systems have an input, process and output Know how freestanding structures can be made stronger, stiffer Realise that materials have both functional properties and aesthetic qualities
Disciplinary knowledge	<ul style="list-style-type: none"> Measure, mark out, cut and shape materials and components with some accuracy Assemble, join and combine materials and components with some accuracy 	<ul style="list-style-type: none"> Develop an authentic and meaningful design brief with the children. Ask the children generate innovative ideas by drawing on research and develop a design specification. Communicate ideas through annotated sketches, pictorial representations of electrical circuits or circuit diagrams. Drawings should indicate the design decisions made, including the location of the electrical components and how they work as a system with an input, process and output. 	<ul style="list-style-type: none"> accurately measure, mark out, cut and shape materials and components accurately assemble, join and combine materials and components accurately apply a range of finishing techniques,
Key vocabulary	Purpose Plan Design Skills Evaluate Product Needle Thread Material Cutting Joining Sewing Measure Fasten Aesthetics	series circuit, parallel , circuit, names of switches and components, input , device, output device, system, monitor, control, program, flowchart	Purpose Plan Design Skills Evaluate Product Structure Support Brace Card Prism Gravity
Future learning	Make and design decorations understanding cultural and independent choices (year 6)	Make and design their own electric product.	Understand how materials can be combined to make structures stronger and stable (year 6)
Spiritual Spark	Did Vikings believe in God?	How are we using the power of electricity to change our lives and the lives of others?	Why is life sometimes described as a ‘rollercoaster’?

Knowing More. Remembering More. Applying More!
Assessment in Foundation Subjects - Design Technology (Year 6)

Teachers to assess how well children have learned the required knowledge at the end of each term.

Working Towards (WTS) **Expected (EXS)** **Greater Depth (GDS)**

	Autumn Term- Shelters	Spring Term – Tudor rose	Summer Term – UKS2 Crest award
Prior learning	Building frame structures to support weight (year 4)	Designing and make a template from an existing item applying individual design. (year 3)	Learning that products evolve and change over time to meet requirements (Year 3)
Substantive Key Knowledge and how it is applied	<ul style="list-style-type: none"> Know how to make strong, stiff shell structures Understand that materials can be combined and mixed to create more useful characteristics Realise how freestanding structures can be made stronger, stiffer and more stable 	<ul style="list-style-type: none"> Understand that a 3D textiles product can be made from a combination of fabric shapes Know how to reinforce and strengthen a 3D framework Links to Topic curriculum 	<ul style="list-style-type: none"> work confidently within a range of contexts, such as the home, school, leisure, culture,enterprise, industry and the wider environment describe the purpose of their products identify the needs, wants, preferences and values of particular individuals and groups
Disciplinary knowledge	<ul style="list-style-type: none"> select materials and components suitable for the task explain their choice of materials and components according to functional properties and aesthetic qualities accurately measure, mark out, cut and shape materials and components 	<ul style="list-style-type: none"> accurately measure, mark out, cut and shape materials and components accurately assemble, join and combine materials and components accurately apply a range of finishing techniques, 	<ul style="list-style-type: none"> carry out research, using surveys, interviews, questionnaires and web-based resources generate innovative ideas, drawing on research make design decisions, taking account of constraints such as time, resources and cost demonstrate resourcefulness when tackling practical problems
Key vocabulary	Purpose Plan Design Skills Evaluate Product Strength support Stability structure Fix Brace	Purpose Plan Design Skills Evaluate Product Needle Thread Material Cutting Joining Sewing Measure Fasten	Purpose Plan Design Skills Evaluate Product Discussion Objective Teamwork Cooperation Pitch Review Dilemma International Epidemic
Future learning	Using a larger variety of tools, mechanical and manual, to achieve a desired task (KS3)	Sewing a variety of strong sewing stiches, including a running stitch to ensure clean edges. (ks3)	Understand a range of problem solving situations and methods to overcome them (KS3)
Spiritual Spark	If you were going to build a shelter anywhere in the world, where would it be?	What emblem would your family have?	Which fruit cocktails would suit which country? Why?