KS1 Design and Technology Progression of Knowledge & Skills

<table>
<tr><th>National Curriculum</th><th>Cycle A: KS1 Progression of Knowledge and Skills</th></tr>
<tr><td rowspan="3">Design
design purposeful, functional, appealing products for themselves and other users based on design criteria generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</td><td>Food:
• I understand that all food comes from plants or animals.
• I know that food has to be farmed, grown elsewhere (e.g. home) or caught.
• I understand how to name and sort foods into the five groups in 'The Eat well plate'
• I know that everyone should eat at least five portions of fruit and vegetables every day.</td></tr>
<tr><td>Design For Manufacture:
• I can generate ideas by drawing on my own experiences.
• I understand the development of existing products: What they are for, how they work, materials used.
• I can begin to develop my design ideas through discussion, observation, drawing and modelling.
• I can identify a purpose for my product.
• I understand how to identify a target group for what they intend to design and make based on a design criteria.
• I can develop my ideas through talk and drawings and label parts.</td></tr>
<tr><td>Creative Risk:
• I can generate ideas by drawing on their own experiences.
• I understand the development of existing products: What they are for, how they work, materials used.
• I can begin to develop my design ideas through discussion, observation, drawing and modelling.
• I can identify a purpose for my product.</td></tr>
<tr><td rowspan="2">Make
select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</td><td>Food:
• I can demonstrate how to prepare simple dishes safely and hygienically, without using a heat source.
• I can demonstrate how to use techniques such as cutting and peeling.</td></tr>
<tr><td>Design For Manufacture:
• I can begin to select tools and materials; use correct vocabulary to name and describe them.
• I can, with help, cut with some accuracy.
• I can learn to use hand tools safely and appropriately.
• I can start to assemble, join and combine materials in order to make a product.
• I can demonstrate how to cut and join fabric to make a simple product.
• I can use basic sewing techniques.
• I can start to use appropriate finishing techniques based on my own ideas.</td></tr>
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	Creative Risk: ● I can build **structures**, exploring and reflecting (in written form) how they can be made stronger, stiffer and more stable. ● I can begin to select tools and materials; use correct vocabulary to name and describe them. ● I can, with help, cut and score with some accuracy. ● I can start to **assemble, join** and **combine** materials in order to make a product. ● I can learn to use hand tools safely and appropriately. ● I can start to use appropriate finishing techniques based on my own ideas.
Evaluating explore and evaluate a range of existing products evaluate their ideas and products against design criteria	**Food:** ● I can evaluate my work against design criteria. ● I can begin to evaluate my product as it is developed and completed, identifying strengths and possible changes they might make. ●
	Design For Manufacture: ● I can evaluate my work against design criteria. ● I can begin to evaluate my product as it is developed and completed, identifying strengths and possible changes they might make.
	Creative Risk: ● I can look at a range of existing products and explain what I like and dislike about them. ● I can evaluate my work against design criteria. ● I can begin to evaluate my product as it is developed and completed, identifying strengths and possible changes they might make.
Technical knowledge build structures, exploring how they can be made stronger, stiffer and more stable explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	**Food:** ● When looking at existing products, I can explain what they like and dislike about products and why. ● I can begin to understand that all food comes from plants or animals. ● I can explore the understanding that food has to be farmed, grown elsewhere (e.g. home) or caught. ● I can start to understand how to sort foods and make healthy choices in '**The Eat well plate**' ● I am beginning to understand that everyone should eat at least five portions of **fruit** and **vegetables** every day. ● I know how to prepare simple dishes safely and **hygienically**, without using a heat source. ● I know how to use techniques such as assembling.
	Design For Manufacture: ● I know that different stitches are used for different purposes.
	Creative Risk: ● I can look at a range of existing products and explain what I like and dislike about them. ● I can evaluate my work against design criteria. ● I can begin to evaluate my product as it is developed and completed, identifying strengths and possible changes they might make.

Cycle A Progression of Knowledge and Skills	
Developing planning and communicating ideas	• Generate ideas by drawing on their own and other people's experiences. • Understand the development of existing products: What they are for, how they work, materials used. • Begin to develop their design ideas through **discussion, observation**, drawing and modelling. • Identify a purpose for what they intend to design and make. • Understand how to identify a target group for what they intend to design and make based on a design criteria. • Develop their ideas through talk and drawings and label parts.
Working with tools, equipment, materials and components to make quality products	• Begin to select tools and materials; use correct vocabulary to name and describe them. • Build **structures**, exploring and reflecting (in written form) how they can be made stronger, stiffer and more stable. • With help measure, cut and score with some accuracy. • Learn to use hand tools safely and appropriately. • Start to **assemble, join** and **combine** materials in order to make a product. • Demonstrate how to **cut, shape** and **join** fabric to make a simple **product**. Use basic sewing techniques. • Start to choose and use appropriate finishing techniques based on own ideas.
Evaluating processes and products	• Evaluate their work against design criteria. • Look at a range of existing products explain what they like and dislike about products and why. • Start to evaluate their products as they are developed, identifying strengths and possible changes they might make. • With confidence talk about their ideas, saying what they like and dislike about them.
Food and Nutrition	• Understand that all food comes from **plants** or **animals**. • Know that food has to be farmed, **grown** elsewhere (e.g. home) or caught. • Understand how to name and sort foods into the five groups in '**The Eat well plate**' • Recall that everyone should eat at least **five portions** of fruit and vegetables every day. • Demonstrate how to prepare simple dishes safely and **hygienically**, without using a heat source. • Demonstrate how to use techniques such as **cutting and peeling**.
Vocabulary: (in addition to, and building on previous year- see also BOLD items above) balanced diet, fabric, strength	

National Curriculum	Cycle B: KS1 Progression of Knowledge and Skills
Design design purposeful, functional, appealing products for themselves and other users based on design criteria generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology	**Food:** • I can start to suggest ideas and explain what I am going to do.

	Design for Manufacture: ● I can begin to draw on my own experience to help generate ideas and research conducted on criteria. ● I can start to suggest ideas and explain what I am going to do. ● I understand how to identify a target group for what I intend to **design** and make based on a design **criteria**. ● I can begin to develop my ideas through talk and drawings. ● I can make **templates** and mock ups of my ideas in card and paper or using ICT. ● I can make links to properties of **materials** in science to consider if certain materials are appropriate.
	Creative Risk: ● I can start to suggest ideas and explain what they are going to do. ● I can begin to develop my ideas through talk and drawings. ● I can make **templates** and mock ups of my ideas in card and paper or using ICT. ● I can make links to properties of **materials** in science to consider if certain materials are appropriate.
Make select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	**Food:** ● I know how to use techniques such as assembling.
	Design for Manufacture: ● I can, with help, **measure**, mark out, cut and shape a range of materials. ● I can explore using tools *e.g. scissors and a hole punch* **safely**. ● I can begin to assemble, **join** and combine materials and components together using a variety of temporary methods e.g. glues or masking tape. ● I can begin to use simple finishing techniques to improve the **appearance** of my product.
	Creative Risk: ● I can begin to build structures, exploring how they can be made stronger, stiffer and more stable. ● I can, with help, **measure**, mark out, cut and shape a range of materials. ● I can explore using tools *e.g. scissors and a hole punch* **safely**. ● I can begin to assemble, **join** and combine materials and components together using a variety of temporary methods e.g. glues or masking tape.
Evaluating explore and evaluate a range of existing products evaluate their ideas and products against design criteria	**Food:** ● I can begin to evaluate my products as they are developed, identifying **strengths** and possible **changes** I might make.
	Design for Manufacture: ● I can start to **evaluate** my product by discussing how well it works in relation to the purpose.
	Creative Risk: ● I can start to **evaluate** my product by discussing how well it works in relation to the purpose. ● I can begin to evaluate their products as they are developed, identifying **strengths** and possible **changes** I might make.

Technical knowledge build structures, exploring how they can be made stronger, stiffer and more stable explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	**Food:** ● When looking at existing products, I can explain what they like and dislike about products and why. ● I can begin to understand that all food comes from plants or animals. ● I can explore the understanding that food has to be farmed, grown elsewhere (e.g. home) or caught. ● I can start to understand how to sort foods and make healthy choices in '**The Eat well plate**' ● I am beginning to understand that everyone should eat at least five portions of **fruit** and **vegetables** every day. ● I know how to prepare simple dishes safely and **hygienically**, without using a heat source. ● I know how to use techniques such as assembling.
	Design for Manufacture: ● I can begin to understand the development of existing **products**: What they are for, how they work, materials used.
	Creative Risk: ● I can make links to properties of **materials** in science to consider if certain materials are appropriate. ● I know that materials are chosen for their purpose based on their properties.

Assessment End Points Year 1	
Knowledge	**Skills**
● I know how to assemble a simple food item **hygienically**, without using a heat source. ● I know the properties of **materials** in Science and consider these when creating my products. ● I know that existing **products** have different uses and are made from appropriate materials.	● I can begin to evaluate my products as they are developed, identifying **strengths** and possible **changes**. ● I can begin to assemble, **join** and combine materials and components together using a variety of temporary methods e.g. glues or masking tape. ● I can start to understand how to sort foods and make healthy choices in '**The Eat well plate**'

Assessment End Points Year 2	
Knowledge	**Skills**
● I know how to design, prepare and assemble a healthy snack hygienically without using a heat source. ● I know that different tools can be used for different purposes. ● I know that different properties of certain **materials** impact my product.	● I can cut and join materials by using a range of techniques. ● I can evaluate my work against design criteria. ● I can evaluate my product identifying changes that could be made (against a criteria). ● I can assemble, cut and join soft materials and use the appropriate tool e.g. sewing needle. ● I can make choices based on my understanding of floating and sinking. ● I can select foods and make healthy choices in '**The Eat well plate**'