

North Star Federation – Design and Technology Assessment Criteria

	KS1	LKS2	UKS2
Designing			
Understanding contexts, users and purposes	use simple design criteria; state what their products are, who and what they are for and how they will work.	gather information about user needs; develop their own design criteria; describe the user, purpose and design features of their products and explain how they will work.	carry out research; develop a simple design specification; describe the user, purpose and design features of their products and explain how they will work.
Generating, developing, modelling and communicating ideas	generate ideas using their own experiences and existing products; use talk, drawing, templates, mock-ups and, where appropriate, computers.	generate realistic ideas based on user needs; use a range of drawing skills, discussion, prototypes, pattern pieces and computer-aided design.	generate innovative ideas drawing on research; use a range of drawing skills, discussion, prototypes, pattern pieces and computer-aided design.
Making			
Planning	plan by suggesting what to do next; select from a range of tools, equipment, materials and components.	order the main stages of making; select suitable tools, equipment, materials and components and explain their choices.	formulate lists of resources and step-by-step plans; select suitable tools, equipment, materials and components and explain their choices.
Practical skills and techniques	follow procedures for safety and hygiene; measure, mark out, cut, shape, assemble, join, combine and finish a range of materials and components.	follow procedures for safety and hygiene; use a wider range of materials and components; measure, mark out, cut, shape, assemble, join, combine and finish with some accuracy.	follow procedures for safety and hygiene; use a wider range of materials and components; measure, mark out, cut, shape, assemble, join, combine and finish with accuracy.
Evaluating			
Own ideas and products	make simple judgements about their products and ideas against design criteria.	evaluate their ideas and products against their design criteria.	identify strengths and areas to develop in their ideas and products against their design specification; consider the views of others to make improvements.
Existing products	explore who and what products are for, how they work and are used, what	investigate how well products have been designed and made, whether they are fit for purpose and meet user needs; why	investigate how well products have been designed and made, whether they are fit for purpose and meet user needs; why

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	materials they are made from and what they like and dislike about them.	materials have been chosen, the methods of construction used and how well they work.	materials have been chosen, the methods of construction used, how well they work, and how innovative and sustainable they are.
Key events and individuals	N/A	know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.	know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.
Technical knowledge			
Making products work	know about the simple working characteristics of materials and components, the movement of simple mechanisms, how freestanding structures can be made stronger, stiffer and more stable; use the correct technical vocabulary.	know that materials have functional and aesthetic qualities; that systems have an input, process and output; how to program a computer to control their products; how to make strong, stiff shell structures; use the correct technical vocabulary.	know that materials have functional and aesthetic qualities; that systems have an input, process and output; how to program a computer to control and monitor their products; how to reinforce and strengthen a framework; use the correct technical vocabulary.
Cooking and nutrition			
Where food comes from	know that food comes from plants or animals and that it is farmed or caught.	know that food is grown, reared and caught in the UK, Europe and the wider world.	know that food is grown, reared and caught in the UK, Europe and the wider world; that seasons may affect the food available; how food is processed into ingredients.
Food preparation, cooking and nutrition	know how to prepare simple dishes safely and hygienically without a heat source, name and sort foods into groups; know that everyone should eat at least five portions of fruit and vegetables a day.	know how to prepare a variety of dishes safely and hygienically; that a healthy diet is made from a variety and balance of different food and drink; that food and drink are needed to provide energy for the body.	know how to prepare and cook a variety of dishes safely and hygienically using, where appropriate, a heat source; that different food and drink contain nutrients, water and fibre that are needed for health.