DT Profile	Aut	Spr	Sum
Skills			
Designing			
1. use a range of information sources to generate ideas for products			
2. investigate how existing products look and function as a source of ideas for their own products, *e.g. examine a range of products related to their task, toys, healthy eating*			
3. develop a simple specification/recipe for their products indicating their intentions and approach			
4. demonstrate their creative thinking when considering and recording solutions to problems that arise during their designing and making, *e.g. realise that it would be quicker and easier to use ready-made materials, components and ingredients rather than make their own*			
5. develop and communicate their design ideas in a variety of ways, using ICT and models where appropriate			
6. consider the safety, reliability and sustainability of their activities/products, *e.g. consider how use or misuse of their products might cause injury, damage or poor health*			
7. evaluate their design ideas as they develop, considering the needs of the user.			
Making			
1. work to their specification/recipe to make products			
2. choose appropriate materials, ingredients, equipment, tools/utensils and techniques, from a range made available to them			
3. measure, mark out, cut, shape, join, weigh and mix a range of materials and ingredients, using appropriate tools/utensils, equipment and techniques			
4. find alternative ways of making if the first attempt fails			
5. apply appropriate finishes to their products			
6. discuss their products, and evaluate their work, *e.g. explain why and how they made their product and what they think about its function, features, performance, taste*			
Food **7.** plan and carry out a broad range of practical food preparation tasks safely and hygienically			
8. apply current healthy eating messages and consider nutritional needs when undertaking food preparation tasks			
9. classify food by commodity/group and understand the characteristics of a broad range of ingredients, including their nutritional, functional and sensory properties, *e.g. meat, fish, fruit, vegetables*			

Rigid and flexible materials	**Aut**	**Spr**	**Sum**
10. use a range of materials and components, making choices based on their developing knowledge of how they should be used, *e.g. using square-section timber or lollypop sticks to strengthen a cardboard structure*			
11. learn about the efficient use of materials, *e.g. planning cutting from sheet materials to minimise waste*			
12. use techniques for reinforcing and strengthening structures in their products, *e.g. use triangulation and gussets in frame structures, use fabric reinforcing in bags, clothing and kites*			
Systems and control **13.** construct simple mechanisms to produce different types of movement, *e.g. use simple levers to move the wings on a bird made from flat card*			
14. build simple low-voltage electrical circuits within products, *e.g. add a simple lighting system to a model house that includes a battery, switch and bulbs*			
15. use programmable/computer control systems that can create, test, modify and store instructions to control events, *e.g. enter and store instructions in a programmable toy, write a simple programme for a floor turtle, control their products using computer hardware/software.*			

Range			
• tasks in which they explore and investigate simple products in order to acquire technological knowledge and understanding that can be applied in their designing and making			
• tasks in which they learn about the responsible use of materials, considering issues of sustainability			
• tasks in which they develop and practice particular skills and techniques that can be applied in their designing and making			
• tasks in which they design and make products, focusing on different contexts and materials.			
They should be given opportunities to: • be creative			
• be innovative			
• work independently and in groups.			
Health and Safety			
Pupils should be taught how to use tools/utensils and equipment safely and to consider the hazards and risks in their activities, behaviour and lifestyle.			
They should be able to follow instructions to control risk to themselves and others, *e.g. ensure that food preparation areas are scrupulously clean; risk associated with hand tools.*			
They should be made aware of the impact on their health and safety of certain behaviour, *e.g. healthy eating.*			