Design and Technology

Year 6 Key Concepts

Design	**Design and Technology Key Concepts**	**Forest School Link**
	I can carry out research, using surveys, interviews, questionnaires and web-based resources.	Not applicable to Forest School.
	I can develop a simple design specification to guide my thinking.	Not applicable to Forest School.
	I can make design decisions, taking account of constraints such as time, resources and cost individuals and groups.	Children learn to plan and choose how they will design and make something. They thinking about what materials are available, Which tools are appropriate to use for the task, who will use the product and how it will be used. Children consider limitations when designing including the time they have to create what they are making, and the resources they have available. Children reflect on the different needs within their group and who the item/structure is being built for.
Make	**Design and Technology Key Concepts**	**Forest School Link**
	I can formulate step-by-step plans as a guide to making.	Not applicable to Forest School.
	I can use a wider range of materials and components than KS1, including electrical components and textiles.	Children explore and work with natural materials, textiles like jute/twine for weaving, tying, or covering as well as using man-made components like tarpaulins. Children have the opportunity to create pulleys/levers etc using rope and sticks/logs etc. Children join, shape, and finish using lashings with rope, weaving textiles to frames, binding sticks and waterproofing shelters with leaves, bark, or fabric.
	I can apply a range of finishing techniques, including those from art and design, with some Accuracy.	Children learn that finishing techniques enhance both safety and aesthetics. The outdoor context provides immediate feedback — a decorated shelter may attract more visitors. Combines art, design, and practical making skills naturally. Encourages patience and precision in hands-on work.

Evaluate	**Design and Technology Key Concepts**	**Forest School Link**
	I can investigate and analyse how much products cost to Make.	Not applicable to Forest School.
	I can investigate and analyse how innovative products are.	Children explore and test how outdoor products work for example shelters and tents - how they resist wind/rain, whilst asking themselves if it solves a problem? could it be improved? etc. Children will consider different solutions to the same problem (e.g., tarp shelter vs. natural branch shelter). They will compare durability, safety, comfort, and ease of making.
	I know about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.	Children experience real-world contexts to see how products change lives. Den building etc. links history of design and invention with hands-on, outdoor exploration. Children valuate not only their own creations but also the impact of past innovations (Stone Age, Iron Age etc.) on how we live and survive outdoors.
Technical Knowledge	**Design and Technology Key Concepts**	**Forest School Link**
	I know how to use learning from mathematics to help design and make products that work.	Children use mathematics in Forest School for example; Measuring sticks or poles to the same length for a shelter frame. Estimating and checking distances (e.g., rope length needed for lashings). Applying knowledge of shapes to make strong and stable structures: Comparing weights of materials: "Which log is light enough to carry but strong enough to hold?"
	I know that a single fabric shape can be used to make a 3D textiles product.	Not applicable to Forest School.
	I know that a 3D textiles product can be made from a combination of fabric shapes.	Not applicable to Forest School.
	I know how more complex electrical circuits and components can be used to create functional products.	Not applicable to Forest School.
	I know how to program a computer to monitor changes in the environment and control their products.	Not applicable to Forest School.

	I know the correct technical vocabulary for the projects they are undertaking.	Not applicable to Forest School.
Cooking and Nutrition	**Design and Technology Key Concepts** I know that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.	**Forest School Link** Children talk about food and the ingredients they are using when cooking in Forest School. They also discuss allergies that some people have to certain ingredients within a product – egg, gluten, dairy etc and also children who have dietary requirements due to family preference, religion etc.