Year 1 and Year 2 – Design & Technology Big Questions and Target Memories

2026 – 2027



National Curriculum Coverage
Pupils should be taught:
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.**

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.**

Evaluate
- **Explore and evaluate a range of existing products.**
- **Evaluate their ideas and products against design criteria.**

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.**

Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit Title (Oak National Academy)		Frame Structure: Bridges		Wheels and Axles: Vehicles		Templates in Textiles: Hand Puppets
Big Question		How can we use cutting, folding and joining techniques to create a successful bridge?		How do wheels, axles and materials help vehicles move?		How do designers use fabrics and joining techniques to make products?
Target Memories		I know what bridges are used for and can spot some important features in their design. I can cut paper and card carefully to form a bridge design. I can explore making mock-ups of bridges, using a range of construction methods. I can add strength to reusable materials to create a structure. I can generate ideas by talking and drawing. I can make mock-ups of structures using different shapes and joining techniques. I can finish my bridge using a range of materials and decoration techniques. I can test a bridge structure to determine its strength.		I can identify wheels and axles in a car. I can explore a vehicle and create a design specification for a vehicle. I can describe the properties of card and talk about the use of card in packaging. I can mark out, cut and join sections of card. I can explore and test wheels, axles and axle holders and choose the right one for my vehicle. I can design a vehicle and create the chassis. I can build and finish my vehicle using a range of different materials and strategies. I can test and evaluate my vehicle.		I can identify different types of puppets and how they are made. I can explore fabrics and their properties. I know how to do a running stitch. I can use a design specification to design a puppet. I can make fabric templates to create a hand puppet. I can join fabric together with a simple running stitch. I can add applique details to my hand puppet. I can give and receive feedback.

2027-2028



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Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit Title (Oak National Academy)		Freestanding Structures: Playgrounds		Levers and Sliders: Moving Cards		Rotary Mechanisms: Windmills
Big Question		How can shapes and construction techniques help us create effective play equipment?		How can simple mechanisms make our designs interactive and fun?		How can we use rotary mechanisms to design a working windmill?
Target Memories		I can investigate the shapes and materials used in playground structures. I can explore and create playground structures using construction kits. I can make different structures and explain how to make them stronger and more stable. I can explore and create structures using paper and card. I can plan and design playground structures. I can use my knowledge of structure to make a playground mock-up. I can complete a mock-up of a playground structure. I can test my playground structure to see how strong it is and talk about the results.		I can explore and create lever mechanisms using paper and card. I can explore and create slider mechanisms using paper and card. I can disassemble products to create a design specification. I can describe simple properties of paper and card in my designs. I can make a mechanism in a moving card. I can use different techniques to finish my moving card effectively. I can use paper folding techniques to create an envelope. I can test and improve my moving greetings card.		I can describe rotary motion. I can describe how wind is useful. I can test wind sail designs to decide which is most effective. I can choose materials that would work best for my sails. I can make, test and choose an axle for my windmill. I can make my windmill freestanding. I can finish and test my windmill. I can share my final product design.