

KS1 Autumn Textiles: Fabric Faces	
Previous learning	
In EYFS, pupils are encouraged to weave on a large scale, which is an essential skill to develop, and helps pupils with sewing skills in KS1 and KS2. In Cycle A, pupils are introduced to cutting fabrics (felt only), and joining fabrics using a simple running stitch.	
Substantive Knowledge	Disciplinary knowledge
1. Common fabrics include cotton, denim, hessian, felt, wool, and silk. 2. Fabrics can be used to create different effects and textures. 3. Fabric can be joined using glue, staples, or by sewing. 4. Paper templates can be used when cutting fabrics.	• Use different methods of joining fabrics, including glue and running stitch. • Use glueing, stapling or tying to decorate fabric, including buttons and sequins. • Add simple decorative embellishments, such as buttons, prints, sequins. • Create a design to meet simple design criteria. • Explain how closely their finished products meet their design criteria and say what they could do better in the future.
Lesson 1	Existing products - Exploring fabrics
	• Explore and evaluate a range of existing products in the context of exploring fabrics and fabric dolls/characters.
Lesson 2	Existing products
	• Explore and evaluate a range of existing products in the context of exploring what has been used to make hair on fabric dolls or characters. • Select from and use a range of textiles according to their characteristics in the context of selecting materials to represent their own hair.
Lesson 3	Joining fabrics
	• Select from and use a range of tools and equipment to perform practical tasks for example joining in the context of joining fabrics and materials.
Lesson 4	Using templates
	• Select from and use a range of tools and equipment to perform practical tasks for example cutting in the context of cutting around a template to create a face shape.
Lesson 5	Designing
	• Design purposeful, functional, appealing products for themselves and other users based on design criteria • Generate, develop, model and communicate their ideas through talking, drawing and templates
Lesson 6	Making and evaluating

	• Select from and use a wide range of materials including textiles according to their characteristics • Select from and use a range of tools and equipment to perform practical tasks (for example cutting, shaping, joining and finishing).
Vocabulary	
Design, criteria, evaluate, tools, template, cut, join, sew, glue, fabric, textiles	

KS1
Spring 2
Structures: Windmills
DT

Previous learning

In EYFS, pupils often access the 'junk modelling' as part of continuous provision. Pupils are encouraged by staff to think about the choices of materials, how to join them, and ways they could make their model better. Pupils will revisit some aspects of this unit, when they look at movement and mechanisms in Cycle C, when they create moving vehicles. In Cycle C there will be a greater focus on wheels and axles

Substantive Knowledge

1. Design criteria are the goals that a project must achieve.
2. Different materials can be used for different purposes, depending on their properties.
3. Structures can be made stronger, stiffer and more stable by using cardboard rather than paper, and using triangular shapes rather than squares.
4. A windmill is a machine that harnesses the power of the wind. Windmills may be used to grind grain into flour, to pump water, or to produce electricity.
5. A windmill has a number of blades that spin around when wind blows on them.

Disciplinary knowledge

- Use wheels and axles to make a simple moving model.
- Create a design to meet simple design criteria.
- Generate and communicate their ideas through a range of different methods.
- Construct simple structures, models or other products using a range of materials.
- Talk about their own and each other's work, identifying strengths or weaknesses and offering support.

Lesson 1

What are windmills?

- To explore what windmills are and how they are used.

Lesson 2

Skill - Strong bases

- To explore ways of making strong bases.

Lesson 3

Skill - Sails

- To explore how to make sails for windmills.

Lesson 4

Design

- To be able to design your own windmill.

Lesson 5

Making

- To be able to follow a plan to make a windmill.

Lesson 6

Evaluating

- To be able to evaluate your finished windmill.

Vocabulary

Windmill, strong, stable, base, sail, moving, design, make, evaluate

KS1
Summer 2
Mechanisms: Moving Pictures
DT

Previous learning

In EYFS, pupils have access to small construction kits which include toys with wheels and axles.
 In Cycle B, Spring Term, pupils were exposed to moving parts as part of the project on windmills (however, the focus of the unit was structure rather than mechanisms).
 Pupils will revisit mechanisms and movement again in Cycle C, during their project on moving vehicles.

Substantive Knowledge

1. Design criteria are the explicit goals that a project must achieve.
2. Different tools have characteristics that make them suitable for specific purposes.
3. An axle is a rod or spindle that passes through the centre of a wheel to connect two wheels.
4. A mechanism is a device that takes one type of motion or force and produces a different one.
5. Mechanisms include sliders, levers, linkages, gears, pulleys and cams.

Disciplinary knowledge

- Use a range of mechanisms (levers, sliders, wheels and axles) in models or products.
- Generate and communicate their ideas through a range of different methods.
- Select the appropriate tool for a simple practical task.
- Talk about their own and each other's work, identifying strengths or weaknesses and offering support.
- Explain how closely their finished products meet their design criteria.
- Select and use a range of materials, beginning to explain their choices.

Lesson 1

Exploring existing products

- To explore and evaluate a range of existing products

Lesson 2

Skill: Sliders

- To explore and use mechanisms (for example sliders), in their products in the context of using a slider to make a picture move.

Lesson 3

Skill: Levers

- To explore and use mechanisms (for example levers) in their products in the context of using a lever to make a picture move

Lesson 4

Skill: Wheels

- To explore and use mechanisms (for example wheels), in their products in the context of using a wheel to make a picture move.

Lesson 5

Designing

- To design purposeful, functional and appealing products for themselves and other users based on design criteria
- To generate, develop, model and communicate their ideas through talking, drawing, templates and mock-ups in the context of drawing an annotated sketch to show their ideas about a moving picture.

Lesson 6

Making and evaluating

- To explore and use mechanisms (for example levers, sliders, wheels and axles) in their products to make a moving picture.

	• To evaluate their ideas against design criteria.
Vocabulary	
Design, make, evaluate, mechanism, move, wheels, sliders, levers, design criteria, pull, push, up, down	