Design and Technology

Year 6 – Textiles – Waistcoats

Prior Learning

In Year 5, children will:

Design

- Designing a stuffed toy considering the main component shapes required and creating an appropriate template.
- Considering the proportions of individual components.

Make

- Creating a 3D stuffed toy from a 2D design.
- Measuring, marking and cutting fabric neatly and independently.
- Creating string and secure blanket stitches when joining fabric.
- Using applique to attach pieces of fabric decoration.

Evaluate

- Testing and evaluating an end product and giving further improvements.

Technical Knowledge

- Learning how to sew blanket stitch to join fabric.
- Applying blanket stitch so the space between the stitches are even and regular.

Year 6

In Year 6, children will:

Design

- Designing a waistcoat or other item of clothing in accordance to specification linked to a set of design criteria to fit a specific theme.
- Annotating design.

Make

- Using a template when pinning panels onto fabric.
- Marking and cutting fabric accurately in accordance with a design.
- Sewing a strong running stitch, making small, neat stitches and following the edge.
- Tying strong knots.
- Decorating a waistcoat (or similar) attaching objects using thread and adding a secure fastening.

Evaluate

- Evaluating work continually as it is created.

Technical Knowledge

- Learning different decorative stitches.
- Application and outcome of the individual technique.

Future Learning

In KS3, children will:

Design

- Use research and exploration, such as the study of different cultures, to identify and understand user needs.
- Identify and solve their own design problems and understand how to reformulate problems given to them.
- Develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations.
- Use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses.
- Develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools.

Make

- Select from and use specialist tools, techniques, processes, equipment and

- Threading needles independently.	- Sewing accurately with even regularity of stitches. **Vocab** Annotate, Decorate, Design criteria, Fabric, Target consumer, Waistcoat, Waterproof	machinery precisely, including computer-aided manufacture. - Select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties. **Evaluate** - Analyse the work of past and present professionals and others to develop and broaden their understanding. - Investigate new and emerging technologies. - Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups. - Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists. **Technical Knowledge** - Understand and use the properties of materials and the performance of structural elements to achieve functioning solutions. - Understand how more advanced mechanical systems used in their products enable changes in movement and force. - Understand how more advanced electrical and electronic systems can

		be powered and used in their products [for example, circuits with heat, light, sound and movement as inputs and outputs]. - Apply computing and use electronics to embed intelligence in products that respond to inputs [for example, sensors], and control outputs [for example, actuators], using programmable components [for example, microcontrollers].

Pupils who are secure will be able to:
- Consider a range of factors in their design criteria and use this to create a waistcoat design. - Use a template to mark and cut out a design. - Use a running stitch to join fabric to make a functional waistcoat. - Attach a secure fastening, as well as decorative objects. - Evaluate their final product.

National Curriculum Subject Content			
Design	Make	Evaluate	Technical Knowledge
- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups - Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded	- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. - Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to	- Investigate and analyse a range of existing products. - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. - Understand how key events and individuals in design and technology have helped shape the world.	- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. - Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]. - Understand and use electrical systems in their products [for example,

diagrams, prototypes, pattern pieces and computer-aided design.	their functional properties and aesthetic qualities.		series circuits incorporating switches, bulbs, buzzers and motors]. - Apply their understanding of computing to program, monitor and control their products.