Medium Term Plan – Design Technology - Textiles – Combining different fabric shapes

N.C POS:

- 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 diagrams and prototypes.
- Select from tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] accurately.
- Investigate and analyse a range of existing products.
- Evaluate their ideas and products against their own design criteria.

Concept: patterns, composition, celebration, decades, location, fashion, society, events, culture, application.

Key Vocabulary: seam, seam allowance, wadding, reinforce, hem, template, pattern pieces, name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings, iron transfer paper, design criteria, annotate, design decisions, functionality, innovation, authentic, user, purpose, evaluate, mock-up, prototype.

Prior Learning: Experience of basic stitching, joining textiles and finishing techniques. Experience of making and using simple pattern pieces.

Future Learning

- To further understand how to strengthen, stiffen and reinforce 3-D frameworks. (Y6 end point).

Core Knowledge- non-negotiable

Exploring

- Through investigation of a range of existing products which have been constructed by combining fabric shapes). Understand the following:

  - Whether the different parts (shapes) used are functional or decorative?

  -Who would use the product? What is its purpose?

  -What design decisions have been made?

- Be able to explain what the different fabric shapes look like and how the parts have been joined, recognize whether material have been stiffened, what fastenings have been used and why. Recognise different types of stitching e.g. zig zag stitch, blanket stitch and why that specific type of stitching may have been used e.g. decorative, strong
- Understand the importance of the properties of textiles used in product construction e.g. does it need to insulate?
- Water resistant? Light?

Designing

- Generate innovative ideas by carrying out research including surveys, interviews and questionnaires.
- Develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes and, where appropriate, computer-aided design.

- Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification e.g. gardener belt, iPad holder, cool bag etc.

Making

Produce detailed lists of equipment and fabrics relevant to their tasks e.g. reclaimed and reusable fabrics, dipryl

pins, needles, thread, measuring tape, left/right handed fabric scissors, pinking shears iron, iron transfer paper,sewing machine range of fastenings, materials for insulating or strengthening e.g. bubblewrap, wadding, interfacing, finishing materials e.g. sequins, buttons, fabricpaints

- Formulate step-by-step plans and, if appropriate, allocate tasks within a team.
- Select from and use a range of tools and equipment to make products that are accurately assembled and well finished. Work within the constraints of time, resources and cost.

Evaluating

- Investigate and analyse textile products linked to their final product.
- Compare the final product to the original design specification.
- Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.
- Consider the views of others to improve their work.

Wider Influences

- Clothes designer
- Product designer
- Celebrations
- Weather
- Sustainability
- Our school environment

Enduring Understanding

- A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics.
- Fabrics can be strengthened, stiffened and reinforced where appropriate.