



# Progression Summary – DT

## DESIGN

## FUNCTION

## INNOVATION

## AUTHENTICITY

R

**Recognise:** Experiment with colour, design, texture, form and function.

**Select** the right resources to carry out their own plan.

**Describe** how your product works.

**Identify** who will use your product.

Safely use and explore a variety of materials, tools and techniques,

**Describe** creations, explaining the process they have used.

Build on previous learning, refining ideas and developing the ability to represent them.

Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.

**Select:** Create collaboratively, sharing ideas, resources and skills.

1

Develop and communicate ideas by talking drawing and using IT.

**Identify** what products they are designing and making and who they are for.

Model ideas by exploring materials, components and construction kits.

Plan by suggesting what to do next. **Sequence** steps.

**Explain** your choice of tools and equipment. Follow procedures for health and safety.

**Observe, select, categorise:** Generate ideas based on own experiences.

Assemble, join and combine materials and components.

Work confidently within a range of contexts e.g. imaginary, story-based, home, school, gardens, playgrounds, local community.

**Compare and contrast:** Suggest how own products could be improved.

2

**Explain** how your products will work and what they are for.

**Recall** design criteria to help develop ideas.

Make mock-ups and templates. Measure, mark out, cut and shape materials and components.

**Summarise** how products are *suitable* for the intended *user*.

**Select** from a range of materials and components

**Recall** knowledge of existing products to help come up with ideas.

**Apply** finishing techniques (including those from Art and Design)

Use a range of materials and components including construction materials and kits, textiles, food ingredients and mechanical components.

**Summarise/Reason:** Make simple judgements about their products and ideas against design criteria

3

**Demonstrate understanding:** Develop your own design criteria and use these to inform ideas. Share and clarify ideas through discussion. **Empathise:** Generate realistic ideas, focusing on the needs of the user.

**Describe** the purpose of products. **Explain** how particular parts of their products work. Select materials, components, tools and equipment suitable for the task. **Sequence** the main stages of making.

Gather information and **reach informed conclusions** about the needs and wants of particular individuals and groups.

**Demonstrate understanding:** Work confidently in a wider range of contexts including leisure, culture, industry, enterprise and the wider environment/Use a wider range of materials and components including mechanical and electrical components.

4

Model ideas using prototypes and pattern pieces. Make **reasoned judgements** (design decisions) based on the availability of resources.

**Demonstrate Understanding:** Indicate the design features of products and how they will appeal to intended users.

**Explain** choice of materials and components according to functional properties and aesthetic

Measure, mark out, cut and shape materials; assemble, join- and combine materials and components; **apply** a range of finishing techniques **with some accuracy**

**Reach informed conclusions** about the strengths and areas for development in their ideas and products. Consider the views of others, including intended users, to improve their work.

**Make reasoned judgments:** Refer to design criteria as you design and make/use your design criteria to evaluate your completed products.

5

Use annotated sketches, cross-sectional drawings, exploded diagrams and CAD to develop and communicate ideas. (**Apply**)

**Justify:** Produce appropriate lists of tools, equipment and materials needed. **Explain** choices in relation to the skills and techniques you will be using.

**Invent:** Generate innovative ideas, drawing on research.

**Accurately:**

**Critique** research, using surveys, interviews, questionnaires and web-based resources.

Critically **evaluate** the quality of the design, manufacture and fitness for purpose of your products

6

Develop a simple design specification to guide thinking. **Justify** your specification.

Make design decisions, taking account of constraints such as time, resources and cost. (**Critique**)

Formulate step by step plans as a guide to making.

**Apply** techniques that involve a number of steps.

**Invent:** Demonstrate resourcefulness when tackling practical problems.

- Measure, mark out, cut and shape materials
- Assemble, join- and combine materials and components
- **Apply** a range of finishing techniques

**Hypothesise** the needs, wants, preferences and values of particular individuals and groups.

**Evaluate** your ideas and products against your original design specification.