

## DESIGN & TECHNOLOGY

### Level 2

I can .....

- Work with different materials
- Draw my own idea
- Describe products I know about which are like my design
- Draw, model and describe my ideas
- Explain how and why I have chosen to make my design
- Plan what to do next
- Choose what tools I will need and explain my choice
- Use tools and machines to put things together
- Join/combine/mix materials
- Say what I have done well and what I could do better

### LEVEL 3

I can .....

- Use my experience, and things I know about products to help me design
- List things my design needs to do in a specification
- Write a realistic plan for making
- Explain my ideas clearly and in detail
- Annotate my designs to explain details
- Use sketches and models to show my ideas
- Think ahead about how to make my design and in what order
- Choose what tools/materials/techniques to use and use them with some accuracy
- Cut, shape and put things together when making
- Evaluate my design, and how well I worked, to say what I changed and improved as I went along

#### LEVEL 4 (Year 7 average)

I can .....

- Gather and use research to help me design
- Specify who will use my design and consider their needs/opinions
- Specify some of the limitations when designing, e.g. time and cost
- Show different ideas using words, sketches and models
- Evaluate and develop my ideas by annotating
- Produce a step by step plan to help me make
- Choose and use a range of tools, equipment and techniques.
- Use a variety of materials/components with some accuracy
- Make my product work well (function)
- Pay attention to quality of finish when making
- Evaluate what works well with my product and what could be improved

#### LEVEL 5 (Year 8 average)

I can .....

- Gather and use research from various sources and evaluate my results
- Use things I know about existing products when developing my design
- Draw, model and discuss ideas to clarify my thinking
- Show that I understand limitations (e.g. time and materials) in my specification and annotation
- Work from my own detailed plan and change it when needed
- Work with a range of tools, material and equipment with some precision

- Check and measure my work as it develops and correct errors
- Test and evaluate my work, comparing it to my design specification (spec)

## LEVEL 6 (Year 9 average)

I can .....

- Write conclusions from my research and explain how it will help my designing and making
- Use a range of sources for information and show I understand the making and working of existing products
- Discuss my design ideas with the end user
- Use models and drawings to explore and test my design thinking
- Produced a detailed specification - which reflects my research and considers users, constraints, resources, form, function, quality etc
- Compare designs to my specifications , by using annotation
- Plan different ways to complete my product if things go wrong or to save time
- Use, and show that I understand, a range of tools, materials, equipment, components and processes
- Check my work as I go along, and usually correct/avoid errors
- Test and evaluate my product in use
- Compare my final product to each specification

## LEVEL 7

I can .....

- Use a wide range of appropriate sources of information to develop my ideas

- Research possible forms, functions and production techniques for my design
- Communicate, using a variety of media and techniques e.g. models, mock ups, orthographic/isometric/perspective drawings and using ICT eg. '2D Design'
- Consider the needs of a range of users, e.g. children aged 3-5, in my specification
- Produce a fully realistic design
- Annotate to show that I recognise 'conflicting' demands on my designs
- Include the time needed for the main stages of making in my production plan
- Understand the characteristics/properties of a range of materials, tools and processes (e.g. properties of acrylic, use of blender, effects/limitations of 'batik') and take account of these.
- Adapt my making to changing circumstances and explain these adjustments
- Work out ways to test product fully and evaluate against the specification
- Adjust my product to improve it following evaluation

## LEVEL 8

I can .....

- Use a range of strategies to develop appropriate ideas, responding to information I have identified
- When planning, make decisions on materials and techniques based on my understanding of the physical properties and working characteristics of materials
- Identify conflicting demands on my design
- Explain how my ideas address conflicting demands
- Analyse the task and specification fully in order to produce proposals

- Organise my work so that I carry out processes accurately and consistently
- Use tools, equipment, materials and components with precision
- Identify a broad range of criteria for evaluating my products
- Clearly relate my evaluation findings to the purpose for which the products were designed
- Evaluate whether I have made appropriate use of resources

## **EXCEPTIONAL**

I can .....

- Seek out information to help my design thinking, and recognise the needs of a variety of client groups
- Be discriminating in my selection and use of information sources to support my work
- Work from formal plans that make the best use of time and resources
- Work with tools, equipment, materials and components to a high degree of precision
- Make products that are reliable and robust and that fully meet the quality requirements given in the design proposal