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| **Year Group** | **Investigation** | **Observation** | **Application** |
| **Pre NC** | **EAD37** Manipulates materials to achieve a planned effect | **EAD38** Constructs with a purpose in mind, using a variety of resources**EAD50** Uses what they have learned about the media and materials in original ways, thinking about uses and purposes | **EAD39** Uses simple tools and techniques competently and appropriately**EAD40** Selects appropriate resources and adapts work where necessary**EAD41** Selects tools and techniques needed to shape, assemble and join materials they are using**EAD43** Safely uses and explores a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function**EAD44** Creates simple representations of events, people and objects**EAD51** Represents their own ideas, thoughts and feelings through design and technology, art, music, dance ,role play and stories |
| **1** | **Dt 1** Explore the sensory qualities of materials**Dt 2** Explore ways to construct models | **Dt3** Identify a target group for what they intend to design and make**Dt4** Recognise how structures can be made stronger, stiffer and more stable | **Dt5** Generate and talk about their own ideas**Dt6** Follow safe procedures**Dt7** Take account of simple properties of materials when deciding how to cut, shape and join them**Dt8** Use tools and materials with help |
| **2** | **Dt3** Identify a target group for what they intend to design and make**Dt4** Recognise how structures can be made stronger, stiffer and more stable | **Dt11** Identify a purpose for what they intend to design and make**Dt12** Identify simple design criteria then plan what to do next, using a variety of methods.**Dt13** Observe and take account of properties of materials when deciding how to cut, shape, combine and join them**Dt14** Identify what they could have done differently or how they could improve their work in the future | **Dt15** Evaluate a range of existing products**Dt16** Communicate their ideas using a variety of methods e.g. drawing, making mock-ups, ICT**Dt17** Measure, mark, cut out and shape a range of materials**Dt18** Use mechanisms in their products e.g wheels, slidersDt19 Use simple finishing techniques**Dt20** Talk about their ideas, saying what they like and dislike, and evaluate against their design criteria. |
| **3** | **Dt21** Generate, develop and explain ideas for products to meet a range of needs.**Dt22** Explore ways of meeting design challenges with a food focus using a range of techniques | **Dt23** Identify a purpose and establish criteria for a successful product**Dt24** Evaluate work, adapting and improving where appropriate | **Dt 25** Communicate design ideas in different ways e.g. discussion, annotated sketches, cross-sectional diagrams and prototypes**Dt26** Selecting appropriate tools and techniques, name and describe them**Dt27** Measure, mark, cut-out and shape a range of materials and assemble, join and combine components and materials with some accuracy |
| **4** | **Dt28** Use research to inform their design**Dt29** Explore ways of meeting design challenges with a textile focus. | **Dt30** Evaluate work, adapting and improving through the views of others to improve their work | **Dt31** Communicate design ideas in different ways e.g. discussion annotated sketches, cross-sectional diagrams and prototypes**Dt32**Select from and use a range of materials and components, including construction materials, textiles and ingredients according to their functional properties and aesthetic qualities**Dt33** Join and combine materials and components accurately in temporary and permanent ways**Dt34** Measure, mark, cut-out and shape a range of materials with increasing accuracy |
| **5** | **Dt35** Investigate ways of meeting design challenges with a construction focus**Dt36**Investigate how the work of individuals in design and technology has helped to shape the world | **Dt37** Identify users’ views and take these into account**Dt38** Analyse a range of existing products**Dt39** Estimate and measure using appropriate instruments and units | **Dt40** Plan what they have to do, include how to use materials, equipment and processes**Dt41** Communicate design ideas in different ways e.g. discussion, annotated sketches, cross sectional and exploded diagrams, prototypes pattern pieces and CAD**Dt42** Apply knowledge of mechanical and electrical control when designing and making functional products**Dt43** Refine sequences of instructions to control events or make things happen |
| **6** | **Dt44**Explore alternative ways of making their products, if first attempts fail | **Dt45** Check work as it develops and modify as necessary**Dt46** Evaluate their products, identifying strengths and areas for development, and make appropriate changes | **Dt 47** Draw on and use various sources of information, including ICT sources**Dt48** Generate and clarify ideas for products, considering intended purpose**Dt49** Plan what they have to do, suggesting a sequence of actions and alternatives if needed**Dt50** Choose how to communicate design ideas as they develop, considering use and purpose**Dt51** Select from a wide range of tools and equipment to perform practical tasks accurately |