

***Subject***

***Skills development for planning progression through the curriculum.***

***Knowledge should be taught at age related expectations within the content, taken from the National Curriculum programme of study.***

***Skills should be learned at the level of the children’s ability.***

*Key Questions for the teacher:*

1. *Is the quality of children’s work improving over time?*
2. *Are children broadening their knowledge?*
3. *Are children raising the level of their skills which they can use and apply throughout their work?*
4. *Are children deepening their understanding of the areas being studied?*

Subject: Age Related Statutory Coverage

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|  | ***Key Stage One Learning*** | ***Key Stage Two Learning*** |
| ***Skills*** | Design: Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.  Design: Design purposeful, functional, appealing products for themselves and other users based on design criteria.  Make: Select from and use a range of tools and equipment to perform practical tasks.  Make: Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.  Evaluate: Explore and evaluate a range of existing products.  Evaluate: Evaluate their ideas and products against design criteria.  Technical Knowledge: Build structures, exploring how they can be made stronger, stiffer and more stable.  Technical Knowledge: Explore and use mechanisms in their products.  Cooking and Nutrition: Use the basic principles of a healthy and varied diet to prepare dishes.  Cooking and Nutrition: Understand where food comes from. | Design: 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.  Design: Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.  Make: Select from and use a wider range of tools and equipment to perform practical tasks.  Make: Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.  Evaluate: Investigate and analyse a range of existing products.  Evaluate: Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.  Evaluate: Understand how key events and individuals in design and technology have helped shape the world.  Technical Knowledge: Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.  Technical Knowledge: Understand and use mechanical systems in their products.  Technical Knowledge: Understand and use electrical systems in their products.  Technical Knowledge: Apply their understanding of computing to program, monitor and control their products.  Cooking and Nutrition: Understand and apply the principles of a healthy and varied diet.  Cooking and Nutrition: Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.  Cooking and Nutrition: Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. |

Overview of Progress/Planning Progression

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| ***Year 1*** | ***Year 2*** | ***Year 3*** | ***Year 4*** | ***Year 5*** | ***Year 6*** |
| * Draw on their own experiences to generate ideas * Suggest ideas and explain what they are going to do * Identify a target group for what they intend to design and make * Model their ideas in card and paper * Develop their design ideas applying findings from their earlier research | * Generate ideas by drawing on their own and other people’s experiences * Develop their design ideas through discussion, observation, drawing and modelling * Identify a purpose for what they intend to design and make * Identify simple design criteria * Make simple drawings and label parts | * Generate ideas for an item, considering its purpose and the user/s * Plan the order of their work before starting * Identify a purpose and establish criteria for a successful product * Explore, develop and communicate design proposals by modelling ideas * Make drawings with labels when designing | * Generate ideas, considering the purposes for which they are designing * Make labelled drawings from different views showing specific features * Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making it if the first attempt fails * Evaluate products and identify criteria that can be used to make their own designs | * Generate ideas through brainstorming and identify a purpose for their product * Draw up a specification for their design * Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail * Use results of investigations, information sources, including ICT when developing design ideas | * Communicate their ideas through detailed, labelled drawings * Develop a design specification * Explore, communicate and develop aspects of their design proposals by modelling their ideas in a variety of ways * Plan the order of their work. Choosing appropriate materials, tools and techniques |
| |  | | --- | | * Make their design using appropriate techniques * With help measure, mark out, cut and shape a range of materials * Use tools *eg scissors and a hole punch* safely * Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape * Select and use appropriate fruit and vegetables, processes and tools * Use basic food handling, hygienic practices and personal hygiene * Use simple finishing techniques to improve the appearance of their product | | |  | | --- | | * Begin to select tools and materials; use vocab' to name and describe them * Measure, cut and score with some accuracy * Use hand tools safely and appropriately * Assemble, join and combine materials in order to make a product * Cut, shape and join fabric to make a simple garment. Use basic sewing techniques * Follow safe procedures for food safety and hygiene * Choose and use appropriate finishing techniques | | |  | | --- | | * Select tools and techniques for making their product * Measure, mark out, cut, score and assemble components with more accuracy * Work safely and accurately with a range of simple tools * Think about their ideas as they make progress and be willing change things if this helps them improve their work * Measure, tape or pin, cut and join fabric with some accuracy * Demonstrate hygienic food preparation and storage * Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT | | |  | | --- | | * Select appropriate tools and techniques for making their product * Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques * Join and combine materials and components accurately in temporary and permanent ways * Sew using a range of different stitches, weave and knit * Measure, tape or pin, cut and join fabric with some accuracy * Use simple graphical communication techniques | | |  | | --- | | * Select appropriate materials, tools and techniques * Measure and mark out accurately * Use skills in using different tools and equipment safely and accurately * Weigh and measure accurately (time, dry ingredients, liquids) * Apply the rules for basic food hygiene and other safe practices *e.g. hazards relating to the use of ovens* * Cut and join with accuracy to ensure a good-quality finish to the product | | |  | | --- | | * Select appropriate tools, materials, components and techniques * Assemble components make working models * Use tools safely and accurately * Construct products using permanent joining techniques * Make modifications as they go along * Pin, sew and stitch materials together create a product * Achieve a quality product | |
| |  | | --- | | * Evaluate their product by discussing how well it works in relation to the purpose * Evaluate their products as they are developed, identifying strengths and possible changes they might make * Evaluate their product by asking questions about what they have made and how they have gone about it | | |  | | --- | | * Evaluate against their design criteria * Evaluate their products as they are developed, identifying strengths and possible changes they might make * Talk about their ideas, saying what they like and dislike about them | | |  | | --- | | * Evaluate their product against original design criteria *e.g. how well it meets its intended purpose* * Disassemble and evaluate familiar products | | |  | | --- | | * Evaluate their work both during and at the end of the assignment * Evaluate their products carrying out appropriate tests | | |  | | --- | | * Evaluate a product against the original design specification * Evaluate it personally and seek evaluation from others | | |  | | --- | | * Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests * Record their evaluations using drawings with labels * Evaluate against their original criteria and suggest ways that their product could be improved | |

Suggestions for Activities to Meet the Curriculum Intent

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| ***Year 1*** | ***Year 2*** | ***Year 3*** | ***Year 4*** | ***Year 5*** | ***Year 6*** |
|  | Textiles – superheroes  Food – vegetable soup. School garden and hot climates  Pneumatics – alien masks  Construction – photo frames | Textiles – Egyptian cross stich  Food – healthy wraps and vegetable fajitas  Pneumatics – moving monsters | Moving parts – moving Christmas cards  Construction – treasure boxes and design-a-playground  Food – pizzas and Greek salads | Textiles – space-scapes  Construction – musical instruments  Mechanics – steady hand game  Food – fruit salads/fruit tarts | Textiles – adventure proof outfit  Mechanics – torches  Food – fishcakes and soup/bread |