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| **Happiness Responsibility Friendship Respect Courage** |
| **DESIGN & TECHNOLOGY** |
| **Design Make Evaluate Technical Knowledge** |
| **Food and Cooking** |
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| **Year 5** | **Year 6 Pan con tomate and Gazpacho** |
| Knowledge | Skills | Knowledge | Skills |
| Y5 Bolognese sauceI know one of the main ingredients in Bolognese is beef and it is reared.I know there are environmental / welfare / cultural issue which need to be considered. | I can talk about the process of farm to fork.I can taste the same product made by different manufacturers and express my likes, dislikes and offer suggestions for change.I can work in a small team to adapt a recipe to make it more healthy, using my knowledge of The Eatwell Guide.I can press, peel, spread, shape, mould, mix, stir, spoon, measure, cut out, grate, snip, cut. Independently.I can work in a team to write our own recipe, create a shopping list, list the equipment needed and follow a recipe independently.I can work safely and hygienically in a small team to produce a Bolognese sauce.I can evaluate it as part of a small group and I can use constructive criticism as point for future development. | Y6 Spanish Soup and Spanish breadI know there are a wide variety of breads, which are celebrated by different countries and religions around the world.I can research the significance of different breads.I know the bread is a carbohydrate and the reason we need these as a balanced diet.i know about dietary requirements. I know which tools/pieces of equipment to select and use with increased independence.I can plan the process of bread making/ sou and I can annotate any changes to my plan.p  | I can research Spanish breads and soup.I can use my senses to explore taste and texture.I can survey and collect data then present resultsI can research different types of ingredient s to meet dietary requirementsI can research a key chefI can adapt a recipeI can follow a design brief and be creative based on my surveyI can weigh, measure, combine, stir, knead, shape, grate, chop and slice.I can work with a high level of independence.I can produce a recipe including utensils and equipment.I can constantly evaluate my product against my criteria. |
| **Textiles** |
| **Using CAD in Textiles** |  |
| **Year 5** | **Year 6** |
| Knowledge | Skills | Knowledge | Skills |
| I know how to research textile designers.I know how to generate innovative ideas in a variety of ways.I know how to use CAD to support design and template creating. I know how to develop, model and communicate ideas.I know how to formulate step by step plans.I know how to select from a range of tools and resourcesI know how to investigate and analyse textile products.I know how to test and evaluate my products. | I can investigate and evaluate a range of existing textile products.I can research textile designers.I can investigate the properties of different textiles.I can use CAD to create 2D patterns and 3D paper mock up.I can improve textile skills including:Threading needlesJoining using a variety of stitchesJoining the right side and making seamsTackingStart/ stopping a row of stitches.I can out research using a survey.I can provide detailed annotated drawings.I can produce step by step plans and show modifications.I can use an art program to design finishings.I can produce a high-quality product showing evidence of IEA’s and FT’s.I can evaluate throughout the process. | Strand not taught in Year 6 | Strand not taught in Year 6 |
| **Mechanisms** |
|  |  |
| **Year 5** | **Year 6** |
| Knowledge | Skills | Knowledge | Skills |
| I know mechanical and electrical systems have an input, a process and an output. I know how gears and pulleys can be used to speed up, slow down or change the direction of movement. | I can use a range of first-hand resources and photographs to explore pulley and gear systemsI can use observational drawings and questions to develop my understanding of how the systems work and the order.I can use construction kits to construct a 2 gear (different size) design and look at ratio.I can build an electric circuit safely to investigate direction and I can record it using the correct symbols.I can carefully use specialist equipment, including a junior hacksaw and G clamp, with accuracy.I can devise a SC by interviewing / questioning the intended user.I can select annotated drawings or exploded diagrams for my plan.I can construct a high-quality product which shows a range of skills and a high-quality finish.I can be self-critical of my end product using the SC. | Strand not taught in Year 6 | Strand not taught in Year 6 |
|  **Structures** |
|  | **Frame Structures** |
| **Year 5** | **Year 6** |
| Knowledge | Skills | Knowledge | Skills |
| Strand not taught in Year 5 | Strand not taught in Year 5 | I know the difference between a permanent and portable frame.I know how to strengthen, stiffen and reinforce 3D frameworksI know about key events and individuals. | I can investigate and make annotated drawings of a range of portable and permanent frame structures including methods of construction and reinforcement.I can research individuals/ key events who have designed significant frame structures in the local and wider world e.g. Eiffel Tower, The Ironbridge.I can use construction kits to build 2D square/ triangular frameworks using diagonals for triangulation.I can explore tubing as a method for reinforcement.I can produce a class/ group design brief personalising it with a list of tools, materials and a step-by-step plan.I can produce an annotated sketch of my plan.I can develop my skills and techniques using a variety of tools, to construct a wooden frame.I can join a variety of materials accurately.I can produce an accurate, high-quality product which shows regular design evaluations and updates where necessary. |
| **Electrical Systems** |
|  | **More complex switches and circuits** |
| **Year 5** | **Year 6** |
| Knowledge | Skills | Knowledge | Skills |
| Strand not taught in Year 5 | Strand not taught in Year 5 |  I know how to use electrical systems in my products and I know how they work.I know how to apply my understanding of computing to program, monitor and control my products. I know and can use the technical vocabulary relevant to the project. | I can research a variety of products which responds to environmental change.-i.e alarm system.I can determine the input and output.I can investigate electrical sensors such as light dependent resistors (LDRs) and a range of switches such as push-to-make switches, push-to-break switches, toggle switches, micro switches and reed switches. I can research famous inventors related to the project e.g. Thomas Edison – light bulb.I can demonstrate how to measure, plan, template, cut and join accurately.I can practise methods for making secure electrical connections. I can be active in developing an authentic and meaningful design brief with the class.I can produce a design annotating the electricity components and how they fit together (Exploded)I can produce a step-by-step plan and a list of equipment needed.I can produce high quality products showing my knowledge and understanding of FTs and IDEAsI can critically assess my work throughout the process comparing it to the original design specification. I can test the system to demonstrate its effectiveness for the intended user and purpose |