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| Subject Area : Design & Technology | |
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| Year Group : 8 | Unit of Work : Scrapheap Challenge |
| Half Term :  1, 2 and 3  17 weeks | Skills :   * Demonstrate your understanding of task one by creating innovative designs for your teams’ vessel * Develop your teamwork skills * Discover how to achieve buoyancy * Demonstrate your design skills by combining your team’s best ideas to create a final concept * Develop your modelling skills by helping your team construct your vessel * Discover key techniques used by engineers to build large ships * Demonstrate your understanding by adapting your vessels ready to test * Develop your idea by trying to simulating the water test * Discover how the 6Rs influence the world of design * Demonstrate your learning by explaining how/why your team has constructed your vessel – focusing on material properties * Develop your ability to critically evaluate. * Discover the impact packaging has on the environment * Demonstrate your problem solving skills by designing your protective packaging * Develop your ideas through peer assessment * Discover the importance of prototype development in the world of design * Demonstrate your ability as a team to design and produce prototypes * Develop and improve your idea based on assessment * Discover what new materials/products have been created to reduce the impact of packaging on the environment * Demonstrate your modelling skills by creating a model of your best idea * Develop your analysis skills by carrying out a final self-assessment before testing * Discover how materials/products are tested commercially * Demonstrate your ability to collect and record accurate data * Develop your reflective learner skills by analysing your test results. * Discover the life cycle of corrugated cardboard boxes * Demonstrate your design thinking skills by converting separate flat pack pieces into a 3D object * Develop your design skills by creating possible ideas for a flat pack toy * Discover how flat pack products are manufactured using CAD/CAM * Demonstrate your understanding of the teacher demo by creating a small scale model of your best design idea * Develop a team design by comparing and analysing everyone’s small scale models * Discover innovative ways scrap corrugated cardboard is transformed into decorative and functional products * Demonstrate your design skills by creating a stencil of all your separate parts * Develop your making skills by using your stencil pattern to cut out your separate pieces * Discover why stores such as IKEA make mostly flat pack products? * Demonstrate your ability to accurately and safely produce a prototype model * Develop your analysing skills by conducting peer and self-assessments of the flat pack toy. |
| Reasons behind order of topic in this half term | |
| * Pupils gain a wider understanding of global issues, why we study Technology and what makes a good engineer. Pupils work together in teams to develop design skills and make small scale prototypes. | |

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| Subject Area : Design & Technology | |
| Year Group : 8 | Unit of Work : Felt Toy |
| Half Term :  4, 5 and 6  18 weeks | Skills :   * To discuss the importance of health and safety in the textiles room * To produce initial design ideas with annotation. * To develop design ideas with decorative stitches * To refer to the mood board for inspiration. * To produce hand embroidery samples * To create dye sublimated images using ICT * To create pattern pieces for final design by hand or ICT * To refer to design ideas and mood board for stitch detail and components * To understand the properties of felted fabric * To demonstrate accurate fabric cutting of pattern pieces * To apply hand embroidery stitches to the doll * To apply the dye sublimation image to the felted fabric * To demonstrate health and safety throughout the FPT * To apply hand embroidery stitches accurately and confidently * To apply the dye sublimation image to the felted fabric * To demonstrate health and safety throughout the FPT * To apply hand embroidery stitches accurately * To apply hand embroidery stitches to the felted fabric. * To understand how to compose a manufacturing specification * To produce a manufacturing specification * To produce blanket stitch embroidery * To apply wadding to doll * To refer to ACCESSFMM when reflecting on your work |
| Reasons behind order of topic in this half term | |
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