Curriculum Content Map

Subject: DT	Year group: 7

	TERM 1 (7 lessons)	TERM 2 (6 lessons)	TERM 3 (6 lessons)
	September October or November December	January February or February March	April May or June July
Virtues	1. Friendliness and Civility (Sept) 2. Justice and Truthfulness (Oct) Or 3. Courage (Nov) 4. Generosity (Dec)	5. Gratitude (Jan) 6. Good Speech (Feb) Or 6. Good Speech (Feb) 7. Good Temper and Good Humour (Mar)	8. Self-Mastery (April and May) Or 9. Compassion (June) 10. Good Sense (July)
Skills	1. Listening (Sept) 2. Leadership (Oct) 3. Problem Solving (Nov) 4. Creativity (Dec)	5. Staying Positive 6. Speaking 7. Staying Positive	8. Aiming High 9. Aiming High 10. Speaking 11. Teamwork
Curriculum Content	Health and Safety in the DT Room. Introduction to Plastics. Introduction to Design Specification	Planning and Designing of Products Sketching, annotating and researching Presenting final idea and ordering of materials	Making an Egg Holder Evaluating the Product
National Curriculum Area	**DT:** • build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users • use research and exploration, such as the study of different cultures, to identify and understand user needs • select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture	**DT:** • use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses • develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools • analyse the work of past and present professionals and others to develop and broaden their understanding	**DT:** • select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties • identify and solve their own design problems and understand how to reformulate problems given to them • test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups • analyse the work of past and present professionals and others to develop and broaden their understanding
Link to Skills and Virtues	**Friendliness and Civility** – Peer support in training in the workroom, understanding health and safety. Sharing of tools, peer-assessing tool skills **Listening** – Instructions regarding the safe use and operation of machinery in the workroom. **Justice and Truthfulness** – When reviewing own work, understanding how false advertisement might damage a products viability. **Leadership** – Lead on presentation of a product, then leading on their own design and product. ----------or---------- **Courage** – Being honest about their skills and confidence levels with tools and machinery they are learning about. **Problem-Solving** – Looking at the product issue, and coming up with a design solution to meet the brief. **Generosity** – allowing peers to use tools at busy periods **Creativity** – A creative, yet appropriate design for a product that uses imagination.	**Gratitude** – Appreciation of products and how they have solved everyday problems **Staying Positive** – Using feedback in a positive way relating to the design of products or use of tools **Good Speech** – Delivering a presentation **Speaking** – Oracy in presentation of idea ----------or---------- **Good Speech** – Delivering a presentation **Speaking** – Oracy in presentation of idea **Good Temper/Humour** – How organisations use branding in their marketing of products **Staying Positive** – Using feedback in a positive way relating to the design of products or tools.	**Self –Mastery** – Independent design and production of Egg Holder, keeping to a timetable. **Aiming High** – Looking for the best finish on the design of the Egg Holder ----------or---------- **Compassion** – Help with peer-feedback and evaluation in a caring and constructive way **Speaking** – Talking about processes they are undertaking when asking to explain processes **Good Sense** – Use of tools and keeping safe in the work room environment. **Teamwork** – Support each other to make sure everyone has time to use the workroom to meet their deadline.
Sequencing and Sequencing Skills	1. Making a. Tools b. Health and Safety 2. Designing a. Introduction to 3. Research a. Introduction to	1. Designing a. Using pictures and words to communicate design needs. 2. Researching a. Ask questions and suggest ideas. 3. Evaluation a. Introduction to positives and negatives of product design.	1. Making a. Using Tools Safely b. Assembling Final Product 2. Evaluation a. Like and Dislike about my final product b. Compare to similar products c. Recommend Changes to final Product
	Builds From - is further developed to. - Using tools during the making of each product in each year group. - Designing an egg holder in Y7 Term 2. - Research products that contain food in Y7 Term 2.	Builds From - Introduction to design (Y7, Term 1) - Introduction to design skills (Y7, Term 1) - Introduction to research skills (Y7, Term 1) is further developed to. - Designing of a Birdbox in Year 8 - Researching of Birdbox designs in Year 8 - Evaluation of final product in Y7 Term 3	Builds From - Introduction to tool use in Term 1 - Basic evaluation skills in Term 2 is further developed to. - Advanced tool use in Year 8 [2022] - Product assembly and prototypes Year 9 - Evaluation of a range of products Year 8
Retrieval	Limited reference at KS2, however students will be asked to do a subject knowledge audit based on design, health and safety.	Looking at knowledge of tools from previous topic. Review the ways of making products.	Evaluate their design and research from previous topic to prepare for the assembly.
New Learning	Deforming plastics Health and safety in the DT room Manufacturing and Design. Tools and Machinery	Annotation and evaluation of existing designs. Researching consumer needs Evaluating common errors in product design.	Making a product, assembling a product. Evaluating the use of a product. Presenting final product for evaluation and feedback.

Independent Learning	Students will complete an identification task about Tools in the workroom and health and safety. Students will complete a manufacturing timeline.	Students will research and existing product on the market for protecting food items. Students will design a logo and branding for their final egg holder.	Students will survey their consumers of the egg holder for evaluative purposes.
Misconceptions			
Vocabulary and Comprehension			
Literacy	Introduction to the terms – Deforming Plastics – Line Bending, Vacuum Forming, Blow Moulding Process, Manufacture Try Square, Pillar Drill, Wet and Dry, Buffing Machine. Forstner Bit, G-Clamp, File, Line Bender	Annotate designs; write long form evaluations of existing products. Research different ideas for own design.	Evaluation. Surveying and audience feedback.
Numeracy	Measurements, scales, rulers, ratios	Sales, successes of products. Design measurements, scales and dimensions of raw materials.	Quantity of materials, measuring when preparing, counting, ratios, scales
Oracy		Presentation Delivery on product design.	
Careers	The careers explored in these topics are: 1. Product Designer 2. Technician 3. Carpenter 4. Engineer	The careers explored in these topics are: 1. Designer 2. Researcher 3. Engineer	The careers explored in these topics are: 1. Designer 2. Engineer 3. Carpenter 4. Marketing
Super curricular activities	Upskilling in the workroom. Making a Door Wedge.	Workroom practice. Supporting premises with additional work.	Trip to warner brothers.
Cross Curricular	Links to PE, Science and Dance Health and Safety		
British values and SMSC	An appreciation that living under the rule of law protects individual citizens and is essential for their wellbeing and safety. Encourage students to accept responsibility for their behaviour, show initiative, and to understand how they can contribute positively to the lives of those living and working in the locality of the school and to society more widely.	Enable students to develop their self-knowledge, self-esteem and self-confidence.	Encourage students to accept responsibility for their behaviour, show initiative, and to understand how they can contribute positively to the lives of those living and working in the locality of the school and to society more widely. Enable students to develop their self-knowledge, self-esteem and self-confidence.
Formative assessment	1. Students will be completing an assessment on health and safety in the workroom. 2. Students will suggest packaging design for a precious gift or item.	1. Students will annotate the design of an existing product 2. Students will evaluate a design of an existing product and reason what they would do to improve it.	1. Students present their final piece and their tool work and craft will be assessed through observation.
Summative assessment	Students will have a summative assessment on the deforming of plastics and associated skills.	Students will complete a summative assessment on the creativity behind an idea, once all the research has been presented to them.	Their final design and evaluation will form their summative assessment.
Personalised Challenge for LA	Students will have image-based worksheets pre-labelled with health and safety awareness.	Students will be shown a pre-annotated sketch to help map their skills across to the main design.	Students will have additional support to have their materials pre-prepared so they can focus on assembly and presentation.
HA Challenge	Students will explore how the environment may affect the plastic deformation.	Students will look at additional products and how branding and logo design might be incorporated into the packaging.	Students will create an accompanying launch campaign to justify how it might work as a larger product.
ICT Opportunities	Reading links. Websites of key manufacturers.	Reading links. Product websites.	Photography iPads. Reading links.
Lesson Structure (tbc)	1 & 2– Workroom Intro, Health and Safety, Tools 3 & 4 – Intro to Product Design, solving problems 5 – Materials and manipulation –woods, plastics 6 – Resources, environment 7 – Making a Door wedge	1 & 2 – Looking at a brief, interpretation, audience needs 3 – Presentation design, materials required. Sketching and annotation 4 – Delivery of design and response to brief 5 – Feedback, evaluation, adjustments to design. 6 – Resource ordering, preparation.	1, 2 & 3 – Product making, workroom use 4. Finishing, presenting, and setting evaluation goals. 5. Evaluation, Reflection, Audience/User feedback 6. Marketing and Branding (7. Marketing and Branding Presentations)