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| Column A | Column B | Column C | Column D |
| Subject | Unique Domain Code | “Big ideas” used to track each pupils summative progress at strategic assessment points | Statements |
| Year 7  Design and Technology | 7 Designing 0.1 | * Understanding contexts, users and purposes | * Works within a range of contexts * Shows a developing awareness of creative risk taking when making design decisions * Has an awareness of where human values may conflict and compromise should be achieved * Shows a developing awareness of detailed design specifications to guide their thinking * Shows a developing awareness of how user needs can be identified and understood through research * Shows an ability to identify and solve their own design problems |
|  | 7 Designing 0.2 | * Generating, developing, modelling and communicating ideas | * Uses specifications to inform design and combine ideas from a variety of sources * Avoids stereotypical responses and generate creative ideas by using a range of approaches, for example biomimicry and user-centred design. * Develops and communicate design ideas using annotated sketches * Produces 3D models to develop and communicate ideas * Uses mathematical modelling to indicate likely performance before using physical materials and components, for instance when developing circuits or gearing systems * Can give oral and digital presentations and use computer-based tools * Where available, uses 2D and begin to use 3D CAD packages to model their ideas * Where available, produces models of their ideas using CAM to test out their ideas |
|  | 7 Making 0.1 | * Planning | * Selects appropriately from specialist tools, techniques, processes, equipment and machinery, including computer-aided manufacture * selects appropriately from a wider range of materials, components and ingredients * Is developing an awareness of the need for ordered sequences and schedules for manufacturing products they design, detailing resources required * Are aware of the need for costings for products they design and make |
|  | 7 Making 0.2 | * Practical skills and techniques | * Follows procedures for safety * Uses a range of materials, components and ingredients * Uses a range of manufacturing techniques including   handcraft skills and machinery to manufacture products   * Has a developing awareness of how to exploit the use of CAD/CAM equipment to manufacture   products   * Can apply finishing techniques, including those from art and design, to a range of materials * Has an awareness of using specialist equipment to mark out materials * Uses a range of material joining techniques * Where available, uses CAD/CAM to produce and apply surface finishing techniques, for example using dye sublimation * Develops skills in modifying the appearance of materials including textiles and other manufactured materials e.g. dying and applique |
|  | 7 Evaluating 0.1 | * Own ideas and products | * Can test, evaluate and refine their ideas and products against a specification, considering the views of intended users and other interested groups * Evaluates their products against their original specification and identify ways of improving them |
|  | 7 Evaluating 0.2 | * Existing products | * Have a developing awareness of new and emerging technologies |
|  | 7 Evaluating 0.3 | * Key events and individuals | * Knows about an increasing range of designers, engineers, chefs, technologists and manufacturers |
|  | 7 Technical Knowledge 0.1 | * Making products work | * uses learning from science to help design and make products that work * uses learning from mathematics to help design and make products that work * understands the properties of materials and how they can be used to advantage * understand the performance of structural elements to achieve functioning solutions * understand how mechanical systems used in their products enable changes in movement and force * shows how to use a range of cooking techniques for example, selecting and preparing ingredients; using utensils and electrical equipment * can start to classify materials by structure * can start to explain about the physical properties of materials e.g. grain, brittleness, flexibility, elasticity, malleability and thermal * has a developing awareness of how more advanced electrical and electronic systems can be powered and used in their products * can show how to use simple electronic circuits * has a developing awareness of textile fibre sources e.g. natural and synthetic and fabrics e.g. plain and woven |
|  | 7 Cooking and Nutrition 0.1 | * Where food comes from | * Recognises that food is produced, processed and sold in different ways, for example conventional and organic farming. * Identifies that people’s choice of food can be affected by availability, season, need, cost where the food is produced, culture and religion * Recognises the importance of a healthy and varied diet as shown in The eatwell guide and Eight tips for healthy eating * Identifies the different amounts of energy and nutrients in food; that these have important functions in the body; and that people require different amounts during their life |
|  | 7 Cooking and Nutrition 0.2 | * Food preparation, cooking and nutrition | * Shows a developing awareness of how to store, prepare and cook food safely and hygienically * Shows a developing awareness of how to use date-mark and storage instructions when storing and using food and drinks * Shows a developing awareness of how to select and prepare ingredients * Shows a developing awareness of how to use a range of utensils and electrical equipment * Shows a developing awareness of how to apply heat in different ways * Shows a developing awareness of taste, texture and smell to decide how to season dishes and combine ingredients * Shows a developing awareness of how to adapt and use their own recipes * Shows a developing awareness of how to cook a repertoire of predominantly savoury dishes to feed themselves and others a healthy and varied diet |

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| Year 8  Design and Technology | 8 Designing 0.1 | * Understanding contexts, users and purposes | * Works confidently within a range of contexts * Takes creative risks when making design decisions * Analyses where human values may conflict and compromise should be achieved * Confidently develops detailed design specifications to guide their thinking * Evaluates a range of research, including the study of different cultures, to identify and understand user needs * Identifies and solve their own design problems |
|  | 8 Designing 0.2 | * Generating, developing, modelling and communicating ideas | * Uses specifications to inform the design of innovative, functional, appealing products that respond to needs and combine ideas from a variety of sources * Avoids stereotypical responses and generate creative ideas by using a range of approaches, for example biomimicry and user-centred design. * Develops and communicates design ideas using annotated sketches * Produces 3D models to develop and communicate ideas * uses mathematical modelling to indicate likely performance before using physical materials and components, for instance when developing circuits or gearing systems * gives oral and digital presentations and use computer-based tools * Where available, confidently uses 2D and begin to use 3D CAD packages to model their ideas and evaluate the outcomes * Where available, confidently produces models of their ideas using CAM to test out their ideas and evaluate the outcomes |
|  | 8 Making 0.1 | * Planning | * Selects appropriately from specialist tools, techniques, processes, equipment and machinery, including computer-aided manufacture * selects appropriately from a wider, more complex range of materials, components and ingredients, considering their properties such as water resistance and stiffness * produces ordered sequences and schedules for manufacturing products they design, detailing resources required * produces costings using spreadsheets for products they design and make |
|  | 8 Making 0.2 | * Practical skills and techniques | * Follows procedures for safety and hygiene and understand the process of risk assessment * Uses a wider, more complex range of materials, components and ingredients, considering their properties * uses a broad range of manufacturing techniques including handcraft skills and machinery to manufacture products precisely * Exploits the use of CAD/CAM equipment to manufacture products, increasing standards of quality, scale of production and precision * Applies a range of finishing techniques, including those from art and design, to a broad range of materials including textiles, metals, polymers and woods * Makes use of specialist equipment to mark out materials * Uses a broad range of material joining techniques including stitching, mechanical fastenings, heat processes and adhesives * Uses CAD/CAM to produce and apply surface finishing techniques, for example using dye sublimation * Investigates and develops skills in modifying the appearance of materials including textiles and other manufactured materials e.g. dying and applique |
|  | 8 Evaluating 0.1 | * Own ideas and products | * Can test, evaluate and refine their ideas and products against a specification, considering the views of intended users and other interested groups * evaluates their products against their original specification and identify ways of improving them * Can actively involve others in the testing of their products |
|  | 8 Evaluating 0.2 | * Existing products | * Can investigate and analyse new and emerging technologies * Can investigate and analyse products through disassembly to decide how they are constructed and how they function * Investigate and analyse the positive and negative impacts that products have in the wider world |
|  | 8 Evaluating 0.3 | * Key events and individuals | * Knows about an increasing range of designers, engineers, chefs, technologists and manufacturers and can relate their products to their own designing and making |
|  | 8 Technical Knowledge 0.1 | * Making products work | * uses learning from science to help design and make products that work * uses learning from mathematics to help design and make products that work * understands the properties of materials, including smart materials, and how they can be used to advantage * understand the performance of structural elements to achieve functioning solutions * understand how more advanced mechanical systems used in their products enable changes in movement and force * shows how to competently use a range of cooking techniques for example, selecting and preparing ingredients; using utensils and electrical equipment * knows to classify materials by structure e.g. hard words, soft woods, ferrous and non-ferrous, thermoplastic and thermosetting plastics * can explain about the physical properties of materials e.g. grain, brittleness, flexibility, elasticity, malleability and thermal * can explain how more advanced electrical and electronic systems can be powered and used in their products * Is able to use simple electronic circuits incorporating inputs and outputs * Can explain about textile fibre sources e.g. natural and synthetic and fabrics e.g. plain and woven * Is developing how to select and modify patterns for use in textile construction |
|  | 8 Cooking and Nutrition 0.1 | * Where food comes from | * Explains how food is produced, processed and sold in different ways, for example conventional and organic farming. * Explains how people’s choice of food can be affected by availability, season, need, cost where the food is produced, culture and religion * Explains the importance of a healthy and varied diet as shown in The eatwell guide and Eight tips for healthy eating. Apply knowledge in the correct context in lessons and beyond. * Explains the different amounts of energy and nutrients in food; that these have important functions in the body; and that people require different amounts during their life. Apply knowledge in the correct context in lessons and beyond. * Applies knowledge of how to taste and cook a broader range of ingredients and healthy recipes, explain how to account for a range of needs, wants and values * Explains and apply how to actively minimise food waste such as composting fruit and vegetable peelings and recycling food packaging * Applies the principles of cleaning, preventing cross-contamination, chilling, cooking food thoroughly and reheating food until it is steaming hot |
|  | 8 Cooking and Nutrition 0.2 | * Food preparation, cooking and nutrition | * Applies knowledge of how to store, prepare and cook food safely and hygienically * Applies knowledge of how to use date-mark and storage instructions when storing and using food and drinks * Applies knowledge of how to select and prepare ingredients * Applies knowledge of how to use a range of utensils and electrical equipment * Applies knowledge of how to apply heat in different ways * Applies knowledge of taste, texture and smell to decide how to season dishes and combine ingredients * Applies knowledge of how to adapt and use their own recipes * Applies knowledge of how to cook a repertoire of predominantly savoury dishes to feed themselves and others a healthy and varied diet |

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| Design and Technology Year 9 | 9 Designing 0.1 | * Understanding contexts, users and purposes | * Works confidently within a range of contexts * Takes creative risks when making design decisions and evaluate the implications of these risks * Analyses where human values may conflict and compromise should be achieved and be able to justify your opinions/decisions in their own designing * Develops design specifications that include a wider range of requirements such as environment, aesthetic, cost, maintenance, quality and safety * Confidently research the health and wellbeing, cultural, religious and socio-economic contexts of their intended users * Understands how to reformulate design problems given to them. |
|  | 9 Designing 0.2 | * Generating, developing, modelling and communicating ideas | * Uses specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations and combine ideas from a variety of sources * Avoids stereotypical responses and generate creative ideas by using a range of approaches, for example biomimicry and user-centred design. * Can decide which design criteria take priority when there are clashes * Can confidently develop and communicate design ideas using annotated sketches * Produces 3D models to develop and communicate ideas * Uses mathematical modelling to indicate likely performance before using physical materials and components, for instance when developing circuits or gearing systems * Gives oral and digital presentations and use computer-based tools * Where available, confidently use 2D and begin to use 3D CAD packages to model, develop and present their ideas and evaluate the outcomes * Where available, use CAD and related software packages to justify their designs before manufacture. |
|  | 9 Making 0.1 | * Planning | * Selects appropriately from specialist tools, techniques, processes, equipment and machinery, including computer-aided manufacture * Selects appropriately from a wider, more complex range of materials, components and ingredients, considering their properties such as water resistance and stiffness |
|  | 9 Making 0.2 | * Practical skills and techniques | * Creates production schedules that inform their own and others’ roles in the manufacturing of products they design * Makes simple use of planning tools, for instance Gant charts * Communicates their plans clearly so that others can implement them * Matches and selects suitable materials considering their fitness for purpose * Follows procedures for safety and hygiene and understand the process of risk assessment * Uses a wider, more complex range of materials, components and ingredients, considering their properties * uses a broad range of manufacturing techniques including handcraft skills and machinery to manufacture products precisely * Exploits the use of CAD/CAM equipment to manufacture products, increasing standards of quality, scale of production and precision * Applies a range of finishing techniques, including those from art and design, to a broad range of materials including textiles, metals, polymers and woods * Can adapt their methods of manufacture to changing circumstances * recognises when it is necessary to develop a new skill or technique |
|  | 9 Evaluating 0.1 | * Own ideas and products | * Can test, evaluate and refine their ideas and products against a specification, considering the views of intended users and other interested groups * Selects appropriate methods to evaluate their products in use and modifies them to improve performance |
|  | 9 Evaluating 0.2 | * Existing products | * Produces short reports, making suggestions for improvements * products that they are less familiar with using themselves * investigates and analyses products considering life cycle analysis * investigates and analyses how products can be developed considering the concept of ‘cradle to grave’ * investigates and analyses the concept of circular economy approaches in relation to product development and consumption |
|  | 9 Evaluating 0.3 | * Key events and individuals | * Knows about an increasing range of designers, engineers, chefs, technologists and manufacturers and is able to relate their products to their own designing and making |
|  | 9 Technical Knowledge 0.1 | * Making products work | * uses learning from science to help design and make products that work * uses learning from mathematics to help design and make products that work * understands the properties of materials, including smart materials, and how they can be used to advantage * understand the performance of structural elements to achieve functioning solutions * understand how more advanced mechanical systems used in their products enable changes in movement and force * shows how to competently use a range of cooking techniques for example, selecting and preparing ingredients; using utensils and electrical equipment * knows to classify materials by structure e.g. hard words, soft woods, ferrous and non-ferrous, thermoplastic and thermosetting plastics and is able to explain the suitability of these products over others * can confidently explain about the physical properties of materials e.g. grain, brittleness, flexibility, elasticity, malleability and thermal * can confidently explain how a range or more advanced electrical and electronic systems can be powered and used in their products * Is able to use simple electronic circuits incorporating inputs and outputs * Can confidently explain about textile fibre sources e.g. natural and synthetic and fabrics e.g. plain and woven * Is able to confidently select and modify a range patterns for use in textile construction * Knows materials can be cast in moulds * Can demonstrate how to make adjustments to the settings of equipment and machinery such as sewing machines and drilling machines * Can apply computing and use electronics to embed intelligence in products that respond to inputs * Makes use of sensors to detect heat, light, sound and movement such as thermistors and light dependant resistors * Knows to apply the concepts of feedback in systems * Know to control outputs such as actuators and motors * Knows how to use software and hardware to develop programmes and transfer these to programmable components for example, microcontrollers * Knows how to make use of microcontrollers in products they design and manufacture themselves * Knows how to construct and use simple and compound gear trains to drive mechanical systems from a high revving motor |
|  | 9 Cooking and Nutrition 0.1 | * Where food comes from | * Explains how and why food is produced, processed and sold in different ways, for example conventional and organic farming, fair trade * Explains how and why people’s choice of food can be affected by availability, season, need, cost, where the food is produced, culture and religion * Compares the cost of food when planning to eat out or cook at home * Evaluates the influence of food marketing, advertising and promotion on diet and purchasing behaviour * Considers the importance of energy balance and the implications of dietary excess or deficiency, e.g. malnutrition, maintenance of a healthy weight * Develops the use of nutrition information and allergy advice panels on food labels to help make informed food choices * Develops a broader range of preparation techniques and methods when cooking, e.g. stir-frying, steaming, blending * Independently develops the use of modified recipes and cook dishes that promote current healthy eating messages * Securely applies the principles of cleaning, preventing cross-contamination, chilling, cooking food thoroughly and reheating food until it is steaming hot |
|  | 9 Cooking and Nutrition 0.2 | * Food preparation, cooking and nutrition | * Securely applies knowledge and independently structure how to store, prepare and cook food safely and hygienically * Securely applies knowledge of how to use date-mark and storage instructions when storing and using food and drinks * Securely applies knowledge and develop how to select and prepare ingredients * Securely applies knowledge of how to use a range of utensils and electrical equipment and evaluate the best use of each, in context * Securely applies knowledge of how to apply heat in different ways * Securely applies knowledge and develop the use of taste, texture and smell to decide how to season dishes and combine ingredients * Securely applies knowledge and develop how to adapt and use their own recipes * Securely applies knowledge and develop how to cook a repertoire of predominantly savoury dishes to feed themselves and others a healthy and varied diet |