

Subject Curriculum Information Pack



Pedmore
High School

Aspire, Persevere, Succeed

Curriculum Intent



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Intent

As a result of our curriculum, Pedmore High School students will be inspired to be innovative and passionate when designing and making and to develop skills for life. Our KS3 curriculum covers the four main disciplines within the department (Food, Graphics, Product Design and Textiles). These are taught to each KS3 student on a 9/10-week carousel (2 lessons per week) by specialist staff. We understand that student's experiences in Design and Technology from primary school are varied so we aim to deliver a breadth of subject content throughout the three years so all students leave KS3 with the same experience and subject knowledge.

Implementation

Our curriculum will provide students with opportunities to:

- Develop lifelong practical skills that will enable them to cook, repair, design and make in their lives outside of Pedmore High School
- Engage in hands on learning in workshops, ICT suites and kitchens
- Develop underlying knowledge of the theory that clearly relates to the practice taking place
- Witness their teachers modelling best practice, whether designing or making
- Work alongside teachers who actively challenge and support them to achieve their potential
- Engage in educational visits where they get to see the subject in real life, therefore leading to greater understanding of careers and exposing them to potential jobs or further education
- Develop their knowledge, understanding and skills that will enable them to pursue their dreams and ambitions beyond Pedmore High School

Assessment is carried out throughout the year through regular and timely formative assessments in class as well as summative assessments linked to the individual unit of study. In each unit students complete an Independent Study Task (IST), mini homework project, focused on that subject specialism. Each week during the unit they are expected to independently build up a booklet of research and information on the topic.

Impact By the end of Key Stage 3:

The impact of our curriculum will be evidenced in:

- Our student's enthusiasm for the subject which is displayed both in and outside of the classroom
- Our students work both evidenced in written and oral form
- Increased number of students opting for GCSE the wide variety of KS4 options in the department
- Progress and attainment in the department
- Further education and careers within sectors related to their learning in the department

Our students are aware that Design and Technology is an integral part to life in our modern world. They are keen to push boundaries, try out new ideas and not be afraid to take risks.

Year 7 Curriculum Assessment Map



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Curriculum Assessment Map: Year 7 DT

	Rotation 1	Rotation 2	Rotation 3	Rotation 4
Topic	Food <u>'Let's Bake!' -An introduction to the principles of nutrition</u>	Graphics <u>Super Juice- Branding and Product Placement</u>	Textiles <u>Juggling Bags</u>	Product Design <u>Automata- Wooden Toy</u>
Key Learning & Skills	<p>The focus of this module is to establish the importance of healthy eating through healthy cooking methods. Students will explore and investigate the importance of food in fulfilling a healthy diet as well as developing food preparation skills.</p> <ul style="list-style-type: none"> -Safe working practice in the food room -Introduction to food and personal hygiene -Food preparation skills -Knife skills -Introduction to using specialist equipment safely -Weighing and measuring different ingredients 	<p>This module introduces students to the importance of graphics, how to pitch to different target market groups and typography. Students will design and make a healthy drinks label using Photoshop.</p> <ul style="list-style-type: none"> -presentation skills -typography -branding and brand identity -market segmentation/ stakeholders -photoshop skills -research skills and creating a mood board -food labelling -dimensioning 	<p>The focus of this module is to introduce students to textiles equipment and printing techniques.</p> <ul style="list-style-type: none"> -Students will undergo a sewing machine skills level 1 test. -printing techniques -batik, heat transfer and block printing -joining fabric -presentation skills -dimensioning and measuring 	<p>The purpose of this module is to introduce students to the different tools and equipment used in the DT workshop. Students will learn how to use them correctly, skilfully and safely. Additionally, students will learn about CAMs, gears and movement.</p> <ul style="list-style-type: none"> -CAMs, gears and movement -dimensioning and marking out -properties of soft wood -cutting wood using a tenon saw and bench hook -making a lap joint -joining techniques -finishing techniques
End Points	By the end of year 7 pupils need to be able to independently select and use basic appropriate tools and equipment safety and correctly within the four DT disciplines. They should be able to explain the different properties of materials and processes they have used. They should be able to explain key health and safety points in the different working environments across DT. They should be able to organise their time effectively each week researching and producing a home work document, Independent Study Task to a high standard			
Informal assessment	Starters and plenaries, paired work and verbal feedback	Starters and plenaries, paired work and verbal feedback	Starters and plenaries, paired work and verbal feedback	Starters and plenaries, paired work and verbal feedback
Formal (summative) Assessment	End of unit assessment. Practical application- knife skills, health and safety	-End of unit assessment. -Annotated evidence of proficient use of Photoshop.	-End of unit assessment -Designing with a brief -Sewing machine driving licence	-End of unit assessment. -The laws of movement, CAMs and gears. - Design and manufacture an automata.

Year 8 Curriculum Assessment Map



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Curriculum Assessment Map: Year 8 DT

	Rotation 1	Rotation 2	Rotation 3	Rotation 4
Topic	Food <u>World Foods /Food Provenance</u>	Graphics <u>Board Game</u>	Textiles <u>All Zipped Up</u>	Product Design <u>Glider Challenge- CAD/CAM</u>
Key Learning & Skills	<p>The focus of this module is to explore food choices and influences from other countries and their traditional dishes. New skills are developed and model GCSE questions learnt throughout the unit.</p> <p>Building upon skills from Year 7: -safe working practice in the food room including hygiene -more advanced knife skills -introduction to new cultures -more advanced cooking skills -introduction to specialist diets -weighing and measuring</p>	<p>This module focusses on numeracy with packaging nets using computer programmes to manufacture a board game. The brief intends to stretch and challenge students learning.</p> <p>Building upon skills from Year 7: -analysis -carbon footprint -typography -branding and brand identity -market segmentation/ stakeholders -more advanced photoshop skills -CAD CAM -nets and tessellation -packaging symbols</p>	<p>Students have an introduction to components building on their previous skills from Year 7. Students will undergo a sewing machine skills level 2 test.</p> <p>Building upon skills from Year 7: -Students will undergo a sewing machine skills level 2 test. -sustainability- 6 R's -appliqué -inserting components -joining fabric -presentation skills -dimensioning and measuring</p>	<p>STEM project to design and create a successful glider, constructed in teams. During this module students are introduced to 2D Design Studio a Computer Aided Design software building new skills to promote using Computer Aided Manufacture.</p> <p>Building upon skills from Year 7: -2D Design -CAD/CAM -dimensioning and marking out -properties of Styrofoam/foamboard board -understanding the physics and forces of flight -joining techniques -finishing techniques -introduction to metals and polymers</p>
End Points	By the end of year 8 pupils need to be able to independently select and use appropriate tools and equipment with confidence, safety and correctly within the four DT disciplines. They should be able to articulate the different properties of materials and processes they have used. They should be able to explain, with confidence, the health and safety points in the different working environments across DT. They should be able to organise their time efficiently each week researching and producing a home work document, Independent Study Task to a high standard.			
Informal assessment	Starters and plenaries, paired work and verbal feedback	Starters and plenaries, paired work and verbal feedback	Starters and plenaries, paired work and verbal feedback	Starters and plenaries, practical group work with team presentation, models and flight competition. Verbal feedback and photographed work.
Formal (summative) Assessment	End of unit assessment. Practical application- knife skills, health and safety	End of unit assessment. Test- key packaging and marketing terminology	End of unit assessment. Processes, applique and construction skills	End of unit assessment. CAD/CAM process. Prototypes and presentations.

Year 9 Curriculum Assessment Map



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Curriculum Assessment Map: Year 9 DT

	Rotation 1	Rotation 2	Rotation 3	Rotation 4
Topic	Food Health and Nutrition	Graphics Chocolate Packaging	Textiles Ugly Dolls (using sustainably sourced materials)	Product Design Technical drawing
Key Learning & Skills	<p>Students will explore further the importance of correct nutrition in maintaining a healthy diet and lifestyle. This will include learning about speciality dietary needs and how nutrition will need to be changed at different life stages. Students will investigate the functional and chemical properties of foods and how different food preparation techniques can affect the sensory properties of foods.</p> <p>Building upon skills from Year 8:</p> <ul style="list-style-type: none"> -Food preparation skills, including advanced knife skills -Scientific investigations into the properties of different foods -Food hazards and contamination -Speciality diets -Dietary needs through different life stages 	<p>This module focusses on branding techniques and touch points and looking at market segmentation. The brief intends to stretch and challenge student's learning of branding products and pitching to a specific target audience.</p> <p>Building upon skills from Year 8:</p> <ul style="list-style-type: none"> -Analysis -Typography -Branding and brand identity -Market segmentation/ stakeholders -4 P's -Customer Profiling -Advanced PowerPoint skills -Nets and tessellation -Packaging symbols 	<p>Students will explore This project, although under the same theme/brief, is very much student led. Product outcomes will vary significantly in complexity and quality. Students will further explore sustainable/recycled fabrics, & create a 3-dimensional product. They will be designing & making their own pattern templates. Surface decoration will be far more complex than previously studied in Y8.</p> <p>Building upon skills from Year 8:</p> <ul style="list-style-type: none"> -Design using a brief -Create their own pattern templates -Explore surface decoration (expanding from the knowledge gained in Y8) -Applique/embroider individual products -Construction of 3D complex shapes 	<p>Students will learn how to draw to British Standards using perspective drawing. They will learn how to draw in 1 point, 2 point and 3-point perspective. Additionally, they will learn how to draw in orthographic, isometric and assembly drawings. They will also learn about industrial processes in manufacturing such as vacuum forming, CAD-CAM, 3D printing and blow moulding. Introduce 3D software Autodesk Inventor.</p> <p>Building upon skills from Year 8:</p> <ul style="list-style-type: none"> -Perspective, Orthographic and Assembly drawings -British standards dimensioning/symbols -CAD-CAM -3D Printing -CAD software Autodesk Inventor
End Points	By the end of year 9 pupils need to be able to independently select and use appropriate tools and equipment with confidence, safety and correctly across the four DT disciplines. They should be able to articulate the different properties of materials and processes they have used. They should be able read and interpret written instruction, processes and engineering drawings. They should be able to understand and explain, with confidence, the health and safety points in the different working environments across DT. They should be able to present their work to their peers with confidence and give constructive feedback on others. They should be able to organise their time efficiently each week researching and producing home work documents, Independent Study Tasks to a high standard.			
Informal assessment	Starters and plenaries, paired work and verbal feedback	Starters and plenaries, paired work and verbal feedback	Starters and plenaries, paired work and verbal feedback	Starters and plenaries, paired work and verbal feedback
Formal (summative) Assessment	End of unit assessment. IST- Project for H/W	End of unit assessment. IST- Project for H/W	End of unit assessment. IST- Project for H/W	End of unit assessment. IST- Project for H/W



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