

Design and Technology Policy

Inspire - Impact - Independence

OAKWOOD ACADEMY MISSION STATEMENT

"Promoting learning excellence - Inclusion beyond the barriers".

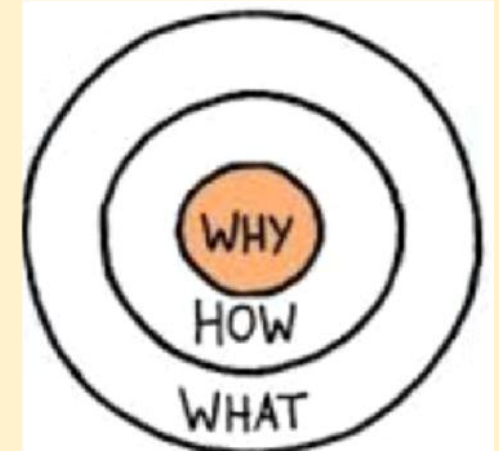
Moral Purpose

"We are united in the belief that together we can inspire all learners to dream, persevere and achieve so that we can change lives for the better, now and for future generations to come"

Policy developed by:	C Rigler
Policy to be reviewed:	Summer 2026
Summary of changes	<ul style="list-style-type: none">· changes to the curriculum content· Introduction of progression frameworks

Aims of Teaching and Learning at Oakwood; Inspire – Impact – Independence

The aim of Teaching and Learning at Oakwood is to provide high quality education which **inspires**, has a positive **impact** on all young people and results in fostering **independence**, preparing them for the future.



Policy Development (How)

This policy has been developed through:

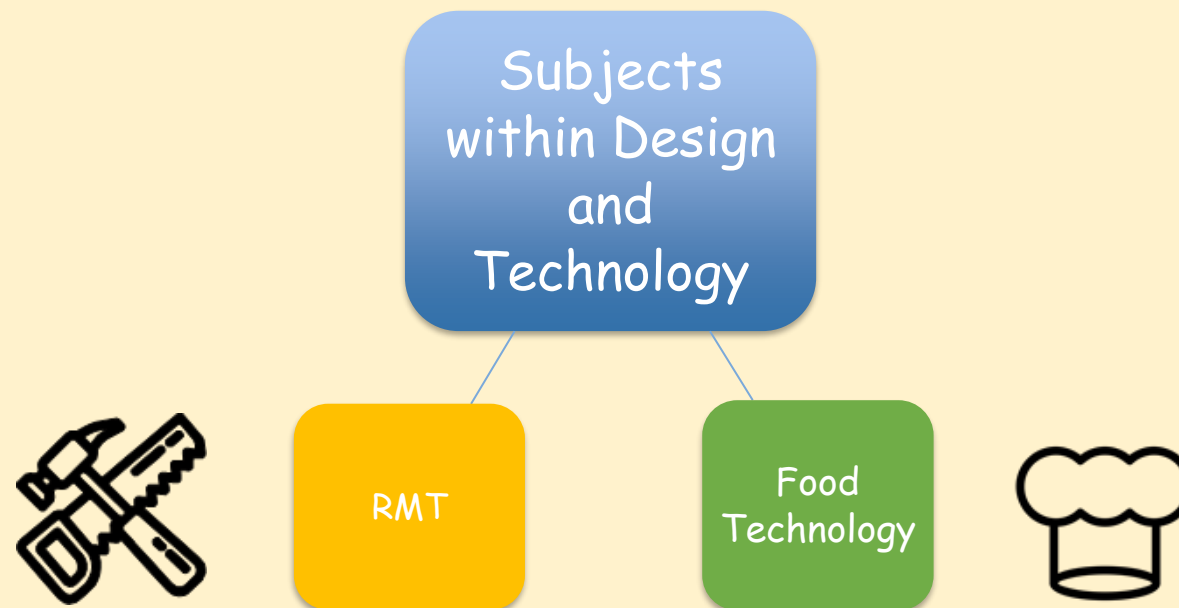
- Review of Design and Technology policy in Summer of 2021
- RAG of action plan for academic year 2020 2021
- Consultation with pupils / parents and staff during the Pandemic
- Developed through the Curriculum Review Autumn 2021 with A.S. and D.J.

Subject information

Design and Technology

Aims of this policy

- To introduce the **vision** of the Design and Technology department.
- To provide a **rationale** for the curriculum intent, design and coverage.
- To explain the effective Teaching and Learning **strategies** involved in Design and Technology.



Design and Technology at Oakwood

Introduction and aims

Introduction:

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.

High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

The purpose of Design and Technology is to stimulate challenge that will engage the pupils and encourage their enquiring minds. To create opportunities for pupils to develop a wide range of practical knowledge and skills that support problem solving to design and make products that will lead to encouraging future interests which aims to spark a love for learning, exploration later in life and can lead to further opportunities in adulthood.

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Professional links:

The Design and Technology department has professional links that support curriculum delivery with: The Data and Technology Association (DATA)

The vision for Design and Technology

Stimulating Challenge

- To provide the pupils with stimulating challenges which will lead to inner satisfaction and confidence when a task has been accomplished
- To encourage lively and inquiring minds with the ability to identify and solve problems both individually and in groups.
- Using creativity and imagination to design and make a range of products for within a range of contexts considering their own and others needs.

Practical knowledge and skills

- To provide a wide range of practical experiences and develop appropriate practical skills.
- To increase the pupils' understanding of critical thinking by encouraging them to discern between good and bad design.
- Pupils take part in a wide range of practical makes spanning over KS1, KS2 and KS3. This choice has been made to ensure that staff can deliver inspiring lessons which are designed to cater to the needs of the learner, rather than their chronological age.

Encouraging Future interest

- To provide all pupils with the best possible technological education up to the age of sixteen and to encourage future interest in this area.
- The key aim for RMT/Food Tech delivered at Oakwood Academy is to promote high standards of Designing and Making, enabling pupils to reach their full potential whilst at the Academy equipping them with key life skills for later in life.

The guiding principles of our curriculum through Design and Technology

Inclusion focus

- We want Design and Technology lessons to support all children. Our lessons are pitched so that all pupils can get an early sense of success.
- We have identified a range of 'spotlight' lessons where we have chosen a range of innovators that have special educational needs and disabilities such as Nikola Tesla. We also embed into the curriculum the impact of developing technology for young people with disabilities, such as assistive technology.

Appropriate content

- The curriculum content has been chosen specifically for its appropriateness for our students, this is driven by rigorous assessments of student starting points.
- We have designed pathways to allow us to ensure that the curriculum is appropriately tailored to those who it is delivered to.
- Content has been selected for this curriculum that develops coordination, spatial awareness, creative thinking, problem solving and incorporates and utilises skills and knowledge from other subject areas

Evidence informed curriculum design

- Our curriculum is evidence informed through rigorous application of the best practice and the science of learning. The pedagogical principles applied are grounded in research.

Making connections across subjects

- Scheme theory is supported by making explicit links between subject areas. This supports opportunities for pupils to embed key vocabulary and learning.
- Our whole school curriculum has been designed with collaboration between all subject leads at its core. We want students learning to be joined up and connected where strong links are possible. For us, this will allow our students, many of who have difficulties with cognition and learning, the best opportunity to experience content across different specialisms. This repetition and opportunities for retrieval practice will allow for deeper learning.
- We have been provided with the opportunity to familiarize our self with the content from different subjects and the plan and build upon any links established.

Knowledge (Components and Concepts)

- Prototype theory is utilized by identifying key concepts across RMT (1 - Designing and modelling, 2 - Making, 3 - Technical knowledge, 4 - Evaluating). These key concepts are then replicated across a range of contexts to embed key learning
- Food Technology (1 Health and Safety 2- Healthy Eating 3-Food and the Environment 4-Practical Cooking Skills)

Sequencing

- Components and composites approach is used to embed key learning from project based schemes of work. Three kinds of activity are included to embed key learning within schemes of work:
 - *Investigative and Evaluative Activities (IEA's)*: with a focus on exploring and research. This will also incorporate opportunities to discuss 'Technology in Society', developing knowledge and skills
 - *Focussed Tasks (FT's)*: with a focus on skill development.
 - *Design, Make and Evaluate Activities (DMEA's)*: with a focus on developing knowledge and skills through product development, following an iterative cycle of reflection and development. The briefs / contexts for this are purposely opened out as the years progress. The initial briefs are quite constrained in terms of proposed outcomes, whereas later in Key Stage 2, there is more ownership for the pupil to explore different opportunities with the context



*Accessibility and
inclusivity*

We are committed to ensuring that all students have equal access to high-quality Design and Technology education, regardless of their disabilities or special education needs. We recognize the importance of creating an inclusive environment where every student can actively participate, engage, and succeed in Design and Technology. This section of our policy outlines our approach to inclusivity and the provision of adapted equipment to support students with disabilities or special education needs.

1. Inclusive Teaching Strategies:

a. The Oakwood T&L principles are based upon inclusive teaching strategies to meet the diverse learning needs of students.

b. Modifications to instructional methods, assessments, and assignments will be made to accommodate individual students, ensuring that they can actively engage and demonstrate their understanding of Design and Technology concepts.

2. Adapted RMT Equipment:

a. Oakwood is equipped with a range of adapted equipment to facilitate the participation and learning of students with disabilities or special education needs.

b. Assistive technologies, such as screen readers, and alternative input devices, will be provided to students with fine and gross motor difficulties. Adapted mice and keyboards are available for those that need them.

c. For students with mobility impairments, we have installed a bank of rise-and-fall tables situated at the front of the room to accommodate any height.

d. Tactile models, enlarged diagrams via, and other sensory aids will be used to enhance the learning experience for students with visual impairments.

e. Additional supports, such as magnifiers, colored overlays, or specialized seating, will be provided based on individual student needs.

f. We have a range of adapted subject specific equipment in Design and Technology including:

Rise and fall workbench

Different types of saws with adapted handles

Adaptations for the Pillar Drill

Light boxes for fine motor skills

Adapted knives

Adapted graters

None slip mats

Adapted sink and washing up area

Specialist equipment to support visually impaired students

5. Accessibility of Design and Technology Facilities:

a. The Design and Technology classrooms have been designed and organized to provide easy accessibility for students with disabilities or special education needs.

b. Clear pathways and appropriate signage will be in place to ensure students can navigate the facilities independently.

c. Consideration will be given to the placement of equipment, ensuring that it is accessible and adjustable to accommodate students with varying physical abilities.



Our approach to teaching Design
and Technology

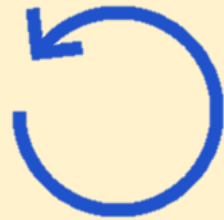
Our Oakwood pedagogical approach

We have developed a pedagogical approach based on a contextual analysis of our students and their needs.

We have used a large research base to inform our selection of approaches to teaching and learning, that we best feel will make the content accessible for our students.

We have divided these strategies into main sub categories:




Foundations



Lesson structure

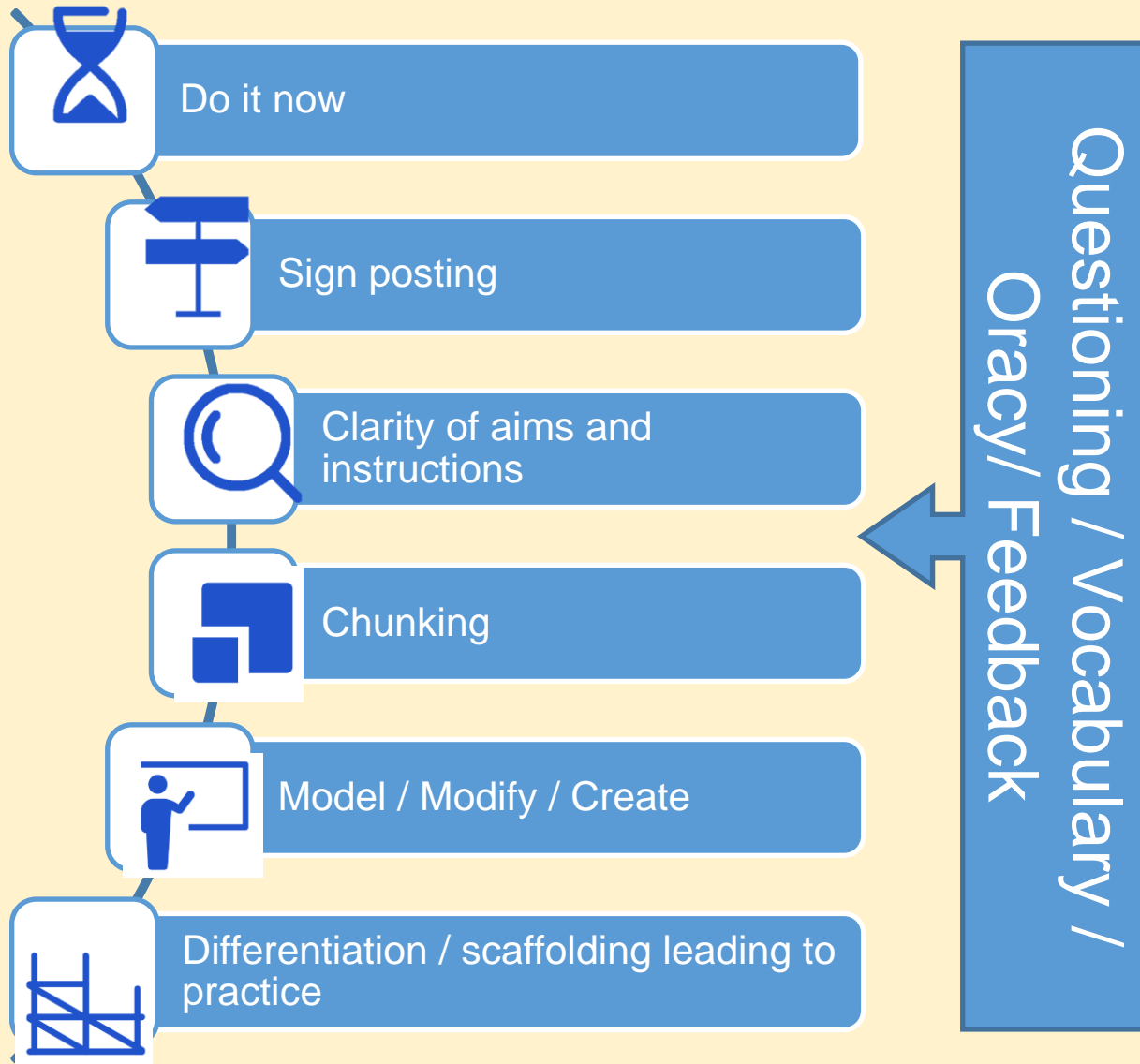


Foundations

<p>Classroom environment</p>		<p>Setting up a classroom that is welcoming, safe and nurturing. Welcoming students and allowing them entry in a calm and orderly fashion. Having a tidy, well organised space free of unnecessary distractions. Consistent routines that establish an effective classroom environment</p>
<p>Knowing students and developing relationships</p>		<p>Developing relationships with students cannot be under estimated. Get to know them well, their needs, strengths and weaknesses and personal circumstances. Familiarise yourself with the EHCP of students in your class to increase pupils motivation.</p>
<p>High expectations</p>		<p>‘The higher the expectations of teachers, the better students perform’ – (Rosenthal & Jacobson). Know students starting points and gaps in knowledge very well. Have the belief that all students can succeed and communicate this belief to the students.</p>

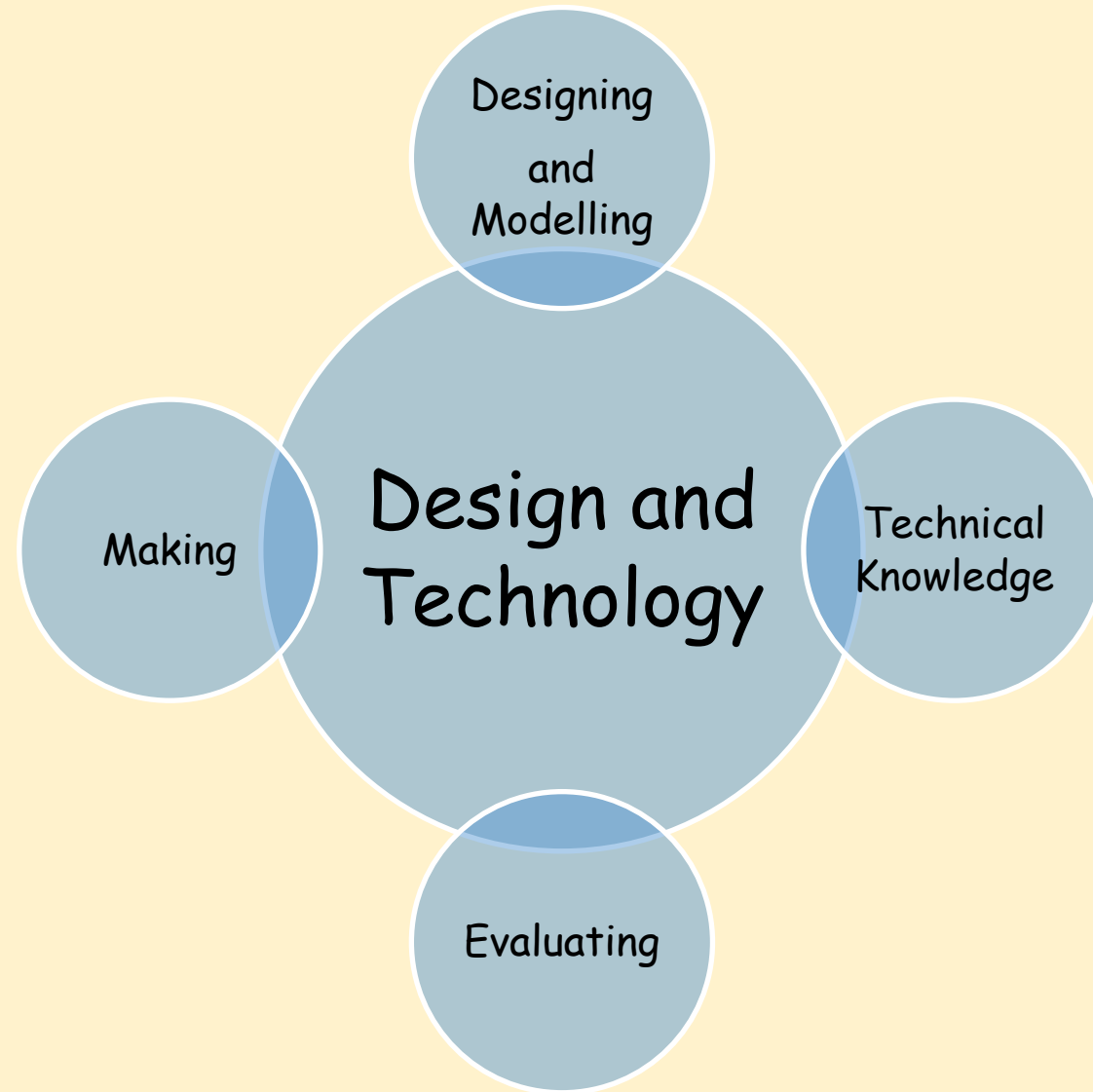
Lesson structure

How the Oakwood Learning strategies are used to improve pupils learning in Technology



Do It Now	<ul style="list-style-type: none"> Memory review activities are strategically planned to recall key knowledge and address misconceptions This helps pupils by building up knowledge of the past to make it increasing secure. Pupils study and revisit their knowledge of a range of areas for example Equipment/Tools, Material/Ingredients, Processes and Health and Safety. We also use recall activities to develop Key words and how they are linked to the Product/Project Pupils also develop their knowledge of important Designers from the Past and the Future and also areas related to SMSC.
Signposting	<ul style="list-style-type: none"> Signposting cues students in to what they can expect from each stage of their lesson. It provides them with structure and clarity.
Chunking	<ul style="list-style-type: none"> We use chunking to break down information and tasks into smaller manageable chunks or sections. This is important considering the low working memory demands of learners.
Modelling	<ul style="list-style-type: none"> Teachers model/demonstrate the key steps of all making/creating/cooking tasks to aid learning and also address misconceptions, we regularly break the lessons into smaller chunks to re evaluate the key skills that are being taught and to make sure that pupils have understood the instructions/key knowledge.
Scaffolding	<ul style="list-style-type: none"> We use a range of strategies to provide individual support for pupils, examples of these may be Sentence starters, writing frames, key word maps, Phonics cards, Differentiated worksheets, omitted key words, multiple choice questions, hinge questions.
Adaptive teaching	<ul style="list-style-type: none"> Scaffolding - we use a range of strategies to provide temporary support for pupils and moving towards them being more independent. Some examples include, writing frames, partially completed examples and hinge questions Stretch and challenge - teachers use the Technology progression framework to identify the outcomes across schemes of work. This helps to provide appropriate stretch and challenge for all learners

The core concepts identified in Design and Technology are:



Curriculum Organization

- There is a curriculum map across the whole of KS2 and 3.
- Pupils will have 3 lessons of RMT and Food in one week and there is a rotation system in place. Pupils change from Food to RMT and back again within an 8-10 week timeframe.
- The Progression Framework adapted to suit the needs of the Oakwood curriculum was developed by the Design and Technology Association in collaboration with the National Curriculum Expert Group for D&T. It provides steps for progression in children's knowledge, understanding and skills
- The curriculum organises content into concepts that encapsulate the disciplines that are core to D&T and expands upon those that are highlighted in the national curriculum's programme of study.
- An underlying principle of the Framework is that pupils' learning should be developed cumulatively. This means that learning from previous key stages should be revisited in teachers' planning and practice and used in a more sophisticated way in subsequent key stages.
- The curriculum sequence builds through the key stages so that as pupils move forward in their education, they are equipped with the prior knowledge that they need to succeed in the next phase.
- The curriculum is based on the programmes of study for KS1 to 3. This covers the Subject Content and also address the Purpose of Study and the Aims in a way that is appropriate to the starting points and needs of our pupils at Oakwood
- There is a purposely strong emphasis on encouraging reflection and iteration, with a pupil-led approach. Rather than a 'designing-by-numbers' approach, pupils will be encouraged to creatively explore briefs and opportunities
- At the end of each topic there are opportunities to review and reinforce the skills and learning gained over the duration of it.

Breadth and Depth of the Design and Technology Curriculum

Designing and Modelling

- Understanding contexts, users and purposes
- Generating, developing, modelling and communicating ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology
- Design purposeful, functional, appealing products for themselves and other users based on design criteria.

Making

- Planning
- Practical skills and techniques
- Select from and use a range of tools and equipment to perform practical tasks example, cutting, shaping, joining and finishing
- select from and use a wide range of materials and components taking into account their properties
- Select from and use specialist tools, techniques, processes, equipment and machinery precisely including CAD and CAM.

Technical Knowledge

- Sustainability
- Impact of technologies, including emerging technologies
- Health and Safety
- Know how to strengthen a product by stiffening a given part or reinforce a part of the structure
- use a simple IT program within the design of a product.

Evaluating

- Own ideas and products
- Existing products
- Look at key events and individuals
- Good and bad designs, manufacture and products on the world and individuals.
- Explore and evaluate a range of existing products
- Evaluate their ideas and products against design criteria

The RMT Curriculum

Vision

- To provide the pupils with stimulating challenges which will lead to inner satisfaction and confidence when a task has been accomplished
- To encourage lively and inquiring minds with the ability to identify and solve problems both individually and in groups.
- Using creativity and imagination to design and make a range of products for within a range of contexts considering their own and others needs.
- To provide a wide range of practical experiences and develop appropriate practical skills.
- To increase the pupils' understanding of critical thinking by encouraging them to discern between good and bad design.
- To provide all pupils with the best possible technological education up to the age of sixteen and to encourage future interest in this area.

Knowledge and Concepts

Designing and Modelling	Making	Technical Knowledge	Evaluating
<p>Understanding contexts, users and purposes</p> <p>Generating, developing, modelling and communicating ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p> <p>Design purposeful, functional, appealing products for themselves and other users based on design criteria.</p>	<p>Confidently select appropriate tools, materials, components and techniques and use them.</p> <p>Use tools safely and accurately</p> <p>Assemble components to make working models</p> <p>Aim to achieve a quality product</p> <p>Demonstrate and make modifications as they go along</p> <p>Construct products using permanent joining techniques.</p>	<p>Understand how mechanical systems work that create movement.</p> <p>Know how to re inforce and strengthen 3D framework</p> <p>Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.</p> <p>Know how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose</p>	<p>Evaluate their products identifying strengths and areas for development and carrying out appropriate tests.</p> <p>Evaluate their work both during and at the end of the assessment.</p> <p>Record their evaluations using drawings with labels.</p> <p>Evaluate against their original Design Criteria and suggest ways that their product could be improved.</p> <p>Evaluate Key Designs of individuals in design and technology that has shaped the world.</p>


























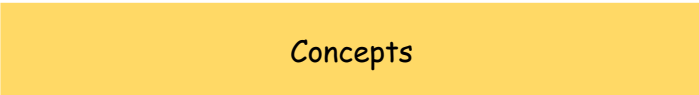



Contexts

CAM toy	Message Board	Keyring	Birdhouse	Structures	Jigsaw
Photo Stand	Ball bearing Game	Memphis Clock	3D printing	EPV	CAD/CAM 2D design

RMT Curriculum Map



Willows Year 1

Cushion	Blackboard/Rotary Mechanism	Structures
Autumn	Spring	Summer
 Communicate initial creative ideas	 Can use pictures and words to show what they want to do	 Identify some important points that will need to be considered in the design of the chosen product
 Identify the basic features of the product	 Can say what their design is going to do/include on it.	 Identify a suitable design for modelling
 With support attempts simple embroidery.	 Select appropriate fixing methods from the choice I am given.	 Identify some tools and processes required
 Can talk about why they have chosen a particular colour scheme or design feature.	 Applies decoration to their product using a range of materials.	 Select appropriate tools for making their product from the choice I am given.
 Identify workshop areas where there may be a hazard or risk	 Identify where there may be a hazard or risk when using machines	 Can move safely around the room carrying their tools correctly
 Identify where there may be a hazard or risk when using general tools	 Identify Health and Safety Symbols	 Can follow instructions to use basic tools correctly and safely.
 When making my product they can say what they have done well.	 Describe how their product works	 Can identify what went well when making their product
 Can identify some key equipment/tools that they have used to create their product.	 Can explain to someone else what their product does.	 Can identify what could be improved next time.
 Designing and Modelling	 Concepts	 Health and Safety
 Making/Technical Knowledge	These concepts have been imbedded into each of the different projects the pupils will undertake throughout the year.	 Evaluating



Willows Year 2



















Catapult	WW2 Aircraft	Fabric Faces/Sewing Board/Weaving
Autumn	Spring	Summer
<p>After doing some research they are able to think of some suitable designs.</p>	<p>Can describe their designs to others by writing or talking about them.</p>	<p>Can label their drawings to identify the features of the design.</p>
<p>Can show their design ideas by drawing pictures or making a model.</p>	<p>Can think of some suitable ideas and start to sketch some design ideas.</p>	<p>When asked they can explain why they have chosen certain materials.</p>
<p>The final product works well and functions properly.</p>	<p>The final product matches their design quite well.</p>	<p>Stitches with some success using pre cut holes as a guide.</p>
<p>Creates simple joins appropriately when using different materials.</p>	<p>The final product shows signs of quality and is well made.</p>	<p>Choses fabric to use in their product explaining why they have made that choice.</p>
<p>Identify workshop areas where there may be a hazard or risk</p>	<p>Identify where there may be a hazard or risk when using machines</p>	<p>Is able to move safely around the room carrying their tools correctly</p>
<p>Identify where there may be a hazard or risk when using general tools</p>	<p>Identify Health and Safety Symbols</p>	<p>Is able to follow instructions to use basic tools correctly and safely.</p>
<p>Can think carefully and talk about what my design will do and how it will be used.</p>	<p>Can make some comments about the final products appearance and colour scheme</p>	<p>Can make some comments about the final products quality of finish</p>
<p>Can talk about some ways that the product was used in the past</p>	<p>Can makes sensible judgements about how my product works.</p>	<p>Can modify and change my product as it is being made and make changes to improve its appearance.</p>
<p>Designing and Modelling</p>	<p>Concepts</p>	<p>Health and Safety</p>
<p>Making/Technical knowledge</p>	<p>These concepts have been imbedded into each of the different projects the pupils will undertake throughout the year.</p>	<p>Evaluation</p>



RMT Curriculum Map



Year 7

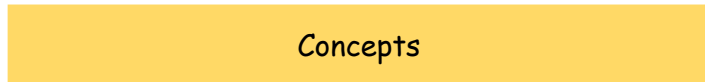
Rotation 1		Rotation 2	
Photo Frame/Picture Stand		Jigsaw/Keyring	
Cutting/Drilling/Sanding/Decorating/Painting Decorating/2D design/Materials/Woods		Heat Press/Belt Sander/Smart Materials/CAD/CAM Lazer Cutter/2D Design/Light Box/3D Printer/Tinker Cad/Specification	
	Can think of an idea and identify what to do next		Can create their own design idea and describe how their idea will work
	Is able to describe why they have chosen their final design		Can describe to someone else how they are going to make their product
	With support measure and mark out materials to a specific length		Is able to work safely in the workshop with some basic tools
	Begin to identify some basic tools and what they are used for		Identifies the correct tools required for the task and describes some uses
	Can identify some natural and manmade woods/specific woods.		Can identify some machines they have used and their uses
	Selects the correct resources to decorate their product		Can identify an advantage and disadvantage of CAD/CAM
	Can identify some Design criteria that their product must/should/could meet		Begin to gain knowledge of how to use 2D Design and its tools correctly
	Can describe with key words what they did to get their finished product		Discuss how their product meets their design criteria
	Can identify a good and bad point of their design		Start to talk about changes they have made during the making process



Designing and Modelling



Making



Concepts

These concepts have been imbedded into each of the different projects the pupils will undertake throughout the year.

Technical Knowledge



Evaluating



RMT Curriculum Map

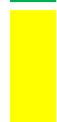


Year 8

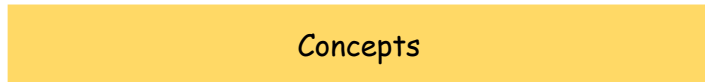
Rotation 1	Rotation 2
Animated message Board	Ball bearing Game
Mechanisms/Levers/Linkages/Modelling Recycling/Environment/Cutting/Nailing/Filing/Gluing Decorating	Planning/ Joints/Measuring and Marking/Screwing/Countersink Gluing/Materials/Nailing/Filing/Painting/Decorating/Packaging
Start to generate ideas by drawing on their own and other peoples experiences	Understand how some products have been made and what joining methods and materials have been used
Begin to develop their ideas through discussion, observation and drawings.	Can investigate/research some exiting products and describe some likes and dislikes
Begin to measure and mark out with some accuracy	Measure, mark out and assemble components with accuracy
Start to choose and use appropriate finishing techniques based on their own ideas	Make us of specialist equipment to mark out materials
Start to gain knowledge of the 6 R's and their impact on the environment	Understand how different joints can make a product stronger
Can identify some different types of Levers and Linkages	Know how to re-inforce and strengthen a 3D framework
Evaluate products for both their purpose and appearance	Record their evaluations using drawings and labels
Say how the have made their product suitable for their intended user	Evaluate their product, identify strengths and areas for development



Designing and Modelling



Making



Concepts

These concepts have been imbedded into each of the different projects the pupils will undertake throughout the year.

Technical Knowledge
























Evaluating



RMT Curriculum Map



Year 9

Rotation 1		Rotation 2	
Cam/Automata Toy		Memphis Clock	
Movements/Cams/Automata/Research/Cutting List/Costing/Joints Plan of Making/Properties of materials/ Temporary and permanent fixings.		Plastic/Tools and processes/Smart Materials/Heat Processes Joining Materials/Adhesives/Working Drawing/Prototype/Model	
	Can create a range of design ideas with detailed labels		Be able to create an Orthographic/working drawing of their design idea
	Start to understand how much products cost to make		Identify a purpose and establish criteria for a successful product
	Is able to cut and join with accuracy ensuring a good quality finish to the product.		With some support is able to create a model/prototype of their clock
	Begin to use specialist equipment (i.e Jigs) to help mark out their work		Select from a wider range of materials, tools and techniques for making their product.
	Can identify different types of Cams and the movement they create		Can identify the difference between thermoplastic and thermosetting plastics
	Start to understand the reason for using permanent and temporary fixings		Can describe what the Memphis design movement was and what the main characteristics were
	Actively involve others in the testing of their product		Can demonstrate when modifications are needed as they go along
	Consider the views of others to help improve their work		Evaluate key designs of individuals who have helped shape the world
	Designing and Modelling		
	Making	<p>These concepts have been imbedded into each of the different projects the pupils will undertake throughout the year.</p>	
		 	

Designing and Modelling

Concepts

Technical Knowledge

Making


























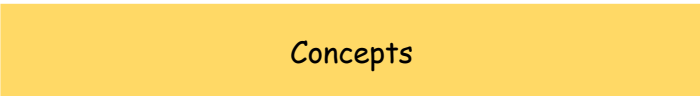



These concepts have been imbedded into each of the different projects the pupils will undertake throughout the year.

Evaluating

RMT Curriculum Map






















Year 10 Entry Pathways

Entry Level 3		Entry Level 3	
Autumn		Spring	
Autumn		Summer	
 Find images of similar products to that chosen for design work	 Create a basic Design brief for the planned product	 Communicate initial creative ideas	
 Identify the basic features of a chosen product	 Identify some important points that will need to be considered in the design of the chosen product	 Identify a suitable design for modelling	
 Identify key points for manufacturing	 Estimate the time required for manufacturing the product	 Identify some tools and processes required	
 Identify the main stages of making	 Produce/Write a basic plan of manufacture	 Make changes to their plan of making where appropriate	
 Select appropriate materials for the chosen product	 Choose appropriate fixing methods	 Select appropriate tools for making their product	
 Explain their choice of materials	 Explain their choice of fixing methods	 Use equipment for making their product in the correct manner	
 Identify workshop areas where there may be a hazard or risk	 Identify where there may be a hazard or risk when using machines	 Select the correct tool(s) for the correct process of making	
 Identify where there may be a hazard or risk when using general tools	 Identify Health and Safety Symbols	 Use equipment for making the product in the correct manner	
 Designing and Modelling	 Concepts		 Making a Product
 Planning	These concepts have been imbedded into each of the different projects the pupils will undertake throughout the year.		 Health and Safety

RMT Curriculum Map



Year 11 Entry Pathways

Entry Level 3		Entry Level 3	
Autumn		Spring	
	Communicate creative design ideas using 2D/3D sketches or drawings		Produce a working drawing
	Write a specification for the chosen product		Identify the main strengths and weaknesses of their product design
	Explain the purpose of the planned product		Make suggestions for improvements
	Record changes to their plan of making		Produce a risk assessment for the given situation
	Explain the reasons for changing their plan of making	 Summer	
	Select appropriate tools for making their product	Course admin and evaluation	
	Use equipment for making their product in the correct manner	Assessment records	
	Apply an appropriate finish to the product	Catch up missed practical work/coursework	
	Be able to use general workshop machinery under guidance		
	Designing and Modelling	 Concepts	
	Planning	These concepts have been imbedded into each of the different projects the pupils will undertake throughout the year.	
		 Making a Product	
		 Health and Safety	

The concepts in Food Studies

Technology Subject Policy



Health and safety

- Hazard awareness in the kitchen
- Personal hygiene routines



Healthy eating

- Healthy Eating Guidelines - The Eatwell Guide and food labelling
- Understanding of the dietary needs of people
- Diet related illness caused by poor diet
- Reducing sugar in the diet
- Increasing fruits and vegetables



Food and the environment

- Where food comes from
- Sustainable farming
- Future farming industries
- Reducing food waste & packaging



Practical cooking skills

- Food Preparation and handling
- Food cooking
- Tidy and washing up
- Recycling

Breadth and Depth of the Food Technology Curriculum

Health and safety

- Hazard awareness in the food room
- Personal hygiene routines

Healthy Eating

- Health eating guideline (eatwell guide)
- Food labelling
- Understanding the dietary needs of people.
- Diet related illness
- Reducing sugar and fat

Practical cooking skills

- Food preparation
- Handling skills

Food and the environment

- Where food comes from
- Sustainable farming
- Reducing food wastage and packaging

Breadth and Depth of the Food Studies Curriculum

Vision

- | | |
|--|--|
| <ul style="list-style-type: none"> To provide the pupils with stimulating challenges which will lead to inner satisfaction and confidence when a task has been accomplished To encourage lively and inquiring minds with the ability to identify and solve problems both individually and in groups. Using creativity and imagination to design and make a range of products for within a range of contexts considering their own and others needs. | <ul style="list-style-type: none"> To provide a wide range of practical experiences and develop appropriate practical skills. To increase the pupils' understanding of critical thinking by encouraging them to discern between good and bad design. To provide all pupils with the best possible technological education up to the age of sixteen and to encourage future interest in this area. |
|--|--|

Concepts

Health and safety	Healthy eating	Food and the environment	Practical cooking skills
<ul style="list-style-type: none"> Hazard awareness in the kitchen Personal hygiene routines 	<ul style="list-style-type: none"> Healthy Eating Guidelines - The Eatwell Guide and food labelling Understanding of the dietary needs of people Diet related illness caused by poor diet Reducing sugar in the diet Increasing fruits and vegetables 	<ul style="list-style-type: none"> Where food comes from Sustainable farming Future farming industries Reducing food waste & packaging 	<ul style="list-style-type: none"> Food Preparation - Weighing and measuring Food preparation - blend, core, crush, cut/chop/slice and trim, drain, grate, juice, peel, prove, sift, snip, zest Food Handling skills - mixing (beat, cream, fold, knead, mash, stir, run in and whisk) Food handling skills - shape (cut out, shape, roll out, Food handling skills - assemble (layer, divide, spread) Food cooking skills - bake, casserole, fry, grill, melt, boil, microwave, roast, stir fry Food skills - chill (fridge, freezer) Food skills - decorate and garnish glaze/coat, pipe Food serving skills - serving Food skills - tidy and wash up (clear away, wash and dry up, put away) Food skills - Recycle packaging/compost food waste (recycle)

Contexts

Mini cooking projects	Food and drink for life	Skills for independent living - A teddy bears picnic	Fruit and vegetables	Healthy eating project	Super healthy snacks	Bread project	Food from around the world	Special diets	Party food project
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Willows

Autumn	Spring	Summer
Diet and drink	Healthy foods and drinks	Where food comes from

The Food groups

My Pizza design

All about scones

Know that food can be grown or bought from shops	Recognise that we all need to eat to grow and be healthy	With help and supervision get ready to cook: tie back long hair, wash and dry hands, put on a clean apron
Know which animals or plants some foods come from (e.g. milk from cows and tomatoes from plants)	Recognise the importance of drinking water	Understand that food that has been dropped on the floor, touched with dirty hands or has turned mouldy should not be eaten and can make people ill
Chooses to eat socially with others	Are able to use cutlery to eat a meal	Know which animals or plants some foods come from (e.g. milk from cows and tomatoes from plants)
Recognise some familiar ingredients (e.g. fruits)	Identify foods that they like and dislike	With help and supervision, take part in simple clearing up tasks such as clearing and cleaning tables

Concepts					
1	2	3	4	5	6
Diet and drink	Consumer awareness	Food choices	Cooking	Food safety	Active lifestyle

Willows

Autumn	Spring	Summer
Hygiene and safety	Diet and drink	Healthy foods and drinks
How do we keep are selves safe and hygienic in the kitchen?	The food groups	My pizza design
<p>Understand that food that has been dropped on the floor, touched with dirty hands or has turned mouldy should not be eaten and can make people ill</p> <p>With help and supervision get ready to cook: tie back long hair, wash and dry hands, put on a clean apron</p> <p>With help and supervision, take part in simple clearing up tasks such as clearing and cleaning tables</p> <p>Use a table knife for spreading (eg butter on toast)</p>	<p>Know that food can be grown or bought from shops</p> <p>Know which animals or plants some foods come from (e.g. milk from cows and tomatoes from plants)</p> <p>Chooses to eat socially with others</p> <p>Recognise some familiar ingredients (e.g. fruits)</p>	<p>Recognise that we all need to eat to grow and be healthy</p> <p>Recognise the importance of drinking water</p> <p>Are able to use cutlery to eat a meal</p> <p>Identify foods that they like and dislike</p>

Concepts					
1	2	3	4	5	6
Diet and drink	Consumer awareness	Food choices	Cooking	Food safety	Active lifestyle



Food Studies Curriculum Map

Year 7

Rotation 1			Rotation 2	
Hygiene and safety	What is an Active Lifestyle?	Diet and drink Healthy lifestyle	Food choices Occasions And Seasons	Consumer awareness Where does food comes from?
Fruit Smoothie, Fruit kebab (DME), Potato Wedges, Rock buns, Bread (DME)			Pizza with a ready made base (DME), Carrot and Cucumber Sticks, Greek Salad, Seasonal apple salad, Apple crumble	
<ul style="list-style-type: none"> Know that all food comes from plants or animals and can identify some foods from each group and understand how they are grown Aware that some food packaging has labels giving information Know some of the influences on the food we eat (e.g. celebrations, preferences) Understand the importance of not wasting food and know how to recycle packaging Can follow basic food safety rules when preparing and cooking food Understand how everyday foods are stored differently to ensure they are safe to eat (e.g. fridge or freezer) Identify what they like and dislike about the food they have cooked and how to improve its taste Follow simple recipe instructions, either in simple sentences or using pictures 			<ul style="list-style-type: none"> Understand that we all need a balanced diet to be healthy and active and need to eat more or less of different foods Are beginning to use the Eat well Guide Understand the importance of water and drinking water regularly Understand the types of food that can affect the health of teeth With supervision take part in simple clearing up tasks such as clearing and cleaning tables, collecting and disposing of rubbish, sweeping the floor With supervision get ready to cook: Tie back long hair, wash and dry hands, put on a clean apron Identify what they like and dislike about the food they have cooked and how to improve its taste Understand the importance of not wasting food and know how to recycle packaging 	

Concepts					
1	2	3	4	5	6
Diet and drink	Consumer awareness	Food choices	Cooking	Food safety	Active lifestyle



Food Studies Curriculum Map

Year 8

Rotation 1			Rotation 2	
Hygiene and safety	What is an Active Lifestyle?	Diet and drink Healthy lifestyle	Food choices Occasions And Seasons	Consumer awareness Where does food comes from?
Spicy Oven Chips, Raisin and Banana Cookies, Dutch Apple Cake, Quick gazpacho, Couscous (DME)			Yogurt and Banana biscuits, Savoury Scones, Focaccia (DME), Fish Fingers, Pizza wheels (DME)	
<ul style="list-style-type: none"> Understand that food is caught or farmed and changed to make it safe and palatable / tasty to eat Understand that people have different views on how food is produced and that this influences the food they buy Understand that there are a variety of influences on the food we choose to eat (e.g. who we are with, season, cost, health, occasion) Begin to read and understand food labels Know and can follow basic food safety rules Understand how bacteria in food can cause food poisoning or food to go mouldy Identify what they would do differently next time to improve what they have made Read and follow a simple recipe 			<ul style="list-style-type: none"> Understand what makes a healthy and balanced diet, and that different foods and drinks provide different substances that the body needs to be healthy and active Are able to use the Eat well Guide Begin to understand appropriate portion sizes for regular meals and healthy snacks Know the importance of a healthy breakfast With guidance follow procedures for clearing up such as washing and drying utensils, clearing and cleaning tables, sweeping the floor, disposing of rubbish, putting equipment away Know how to get ready to cook: tie back long hair, wash and dry hands, put on a clean apron, remove jewellery and nail varnish Recognise and name a broad range of ingredients (e.g. cereals, meat, fish) Know where and how a variety of ingredients are grown 	

Concepts					
1	2	3	4	5	6
Diet and drink	Consumer awareness	Food choices	Cooking	Food safety	Active lifestyle



Food Studies Curriculum Map

Year 9

Rotation 1			Rotation 2	
Hygiene and safety	What is an Active Lifestyle?	Diet and drink Healthy lifestyle	Food choices Occasions And Seasons	Consumer awareness Where does food comes from?
Shortbread Biscuits, Calzones (DME), Welsh Cakes, Tomato And Feta Cheese Soup, Stir-fry (DME)			Tuna Pasta Bake, Spaghetti Bolognese, Pastry tarts (DME), Lemon and Elderflower cake, Full English Breakfast	
<ul style="list-style-type: none"> Understand some of the basic processes to get food from farm to plate Understand social influences on the food we choose to eat (e.g. media, peer pressure, ethics) Understand some of the ethical dilemmas associated with the food people choose to buy Independently use information on food labels to inform my choice Know, and can follow, food safety rules and understand their purpose Independently demonstrate good food safety practices when getting ready to store, prepare and cook food. Identify how they would change the recipe to improve the food they have made Independently read and follow a recipe 			<ul style="list-style-type: none"> Understand the main food groups and the different nutrients that are important for health Are able to make food choices taking in to consideration the Eat well Guide Know appropriate portion sizes and the importance of not skipping meals, including breakfast Independently compare different versions of the same dish and identify how they would change the recipe next time Independently demonstrate good food safety practices when getting ready to store, prepare and cook food (e.g. keep raw meats away from other food) Are able to independently get ready to cook: tie back long hair, wash and dry hands, wear a clean apron, remove jewellery and nail varnish Identify how they would change the recipe to improve the food they have made Know an extensive range of ingredients and how these are grown (e.g. beans, pulses, tropical fruits, vegetables) 	

Concepts					
1	2	3	4	5	6
Diet and drink	Consumer awareness	Food choices	Cooking	Food safety	Active lifestyle



**Food Preparation, Cooking And Serving
Entry 3**

LO1 Be able to use a selection of basic food preparation skills.	LO2 Be able to select suitable equipment to complete set tasks.	LO3 Be able to cook and serve a selection of dishes.
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Lemon Drizzle Muffins, Macaroni Cheese, Veggie Chilli Con Carne, Chelsea Buns, Veggie Spaghetti Bolognese, Stir-fry

**Food And Health
Entry 3**

LO1 Know the principles of a healthy diet	LO2 Be able plan meals to meet dietary needs.	LO3 Be able to use a range of practical skills to make healthy meals/food items.
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Flapjacks, Shepherds Pie, Green Thai Curry, Tuna Pasta Bake, Victoria Sponge Cakes, Eccles Cakes

- AC1.1 Use appropriate food preparation skills when producing food.
- AC1.2 Accurately weigh/measure dry foods/liquids.
- AC2.1 Identify and select correct items of equipment for preparing and serving food.
- AC2.2 Use equipment accurately
- AC2.3 Use equipment safely and hygienically.
- AC3.1 Prepare cook and serve a selection of dishes of consistent quality e.g. pasta dishes; pastry; sweet and savoury dishes using fruit and vegetables; snacks; party foods.

Assessment criteria		
1	2	3
Lesson objective one	Lesson objective two	Lesson objective three

- AC1.1 Identify current nutritional guidelines.
- AC1.2 Identify the main nutrients needed by a body
- AC1.3 Identify food sources for the main nutrients.
- AC2.2 Review sample diets.
- AC2.2 Plan healthy meals.
- AC3.1 Prepare dishes using healthy/alternative foods/cooking methods.

Assessment criteria		
1	2	3
Lesson objective one	Lesson objective two	Lesson objective three



Food Studies Curriculum Map

Year 11

Basic Food Preparation And Cooking Level 1		Course work catch up
LO1 Know The Principal Methods Of Cooking.	LO2 Be Able To Prepare, Cook And Present Simple Dishes.	Course Work Admin And Evaluations

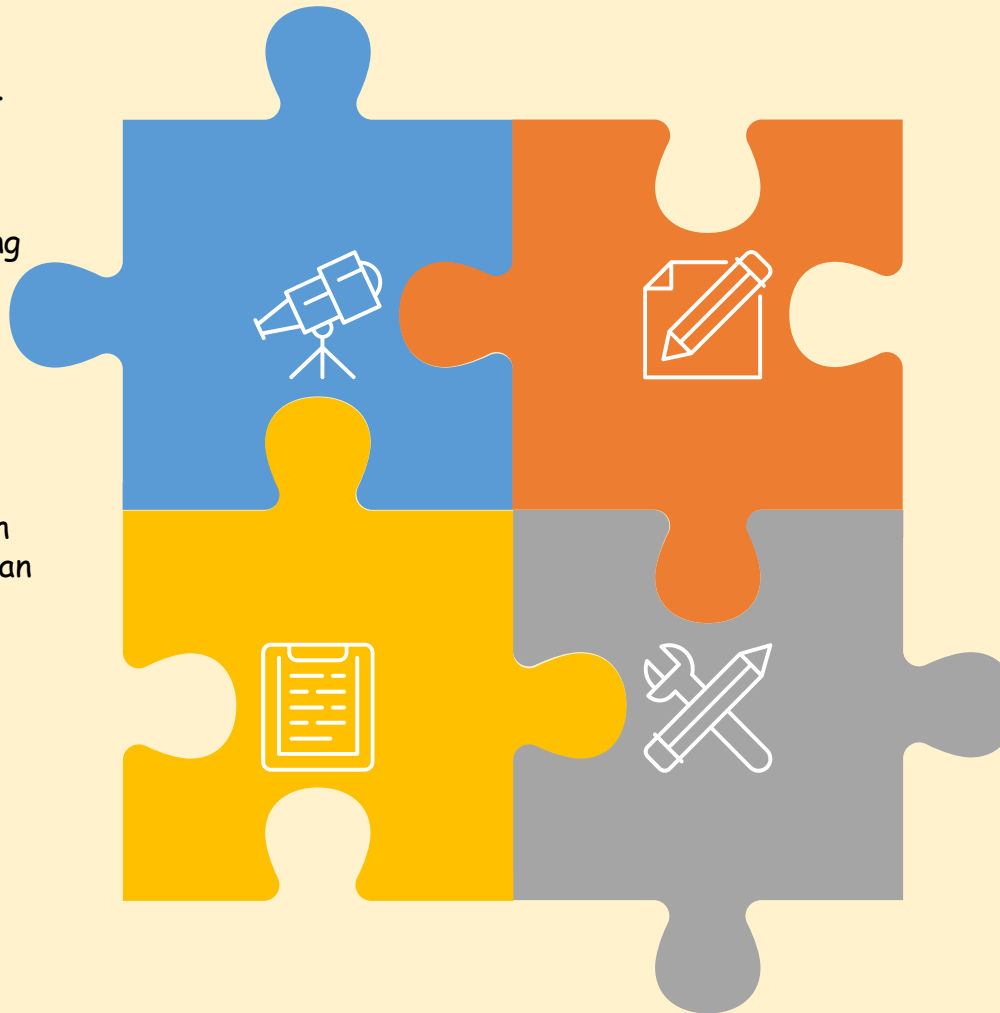
Muffins, Stir-fry, Chilli Con Carne, Chelsea Buns, Spaghetti Bolognaise, Shepherds Pie, Cottage Pie, Roast Dinner, Chicken Fajita Rice Salad, Victoria Sponge Cake, Tuna Pasta Bake, Eccles Cakes

AC1.1 State the principal methods of cooking.	Assessment records
AC1.2 State typical cooking methods for different commodities.	Catch up missed practical cooking
AC2.1 Prepare, cook and present simple dishes safely and hygienically, using wet and dry methods.	Catch up coursework
AC2.2 Clean work areas and equipment safely and hygienically during and after preparing and cooking food.	
AC2.3 State safe working practices for different cooking methods.	
AC2.4 Review own performance and make suggestions for future improvements.	

Assessment criteria	
1	2
Lesson objective one	Lesson objective two

Links to wider learning

Food Technology



Science

Energy from Food, Energy transfers and stores.
Fitness and effects of food and nutrition on the body.
Chemical reactions during cooking and baking.
Balanced diet and Healthy choices.
Farming problems.
Plant growth and where food comes from.
Measurement and conversions in recipe scaling

Geography: Studying global cuisines and investigating the geographical origins of ingredients

Modern Foreign Languages- Exploring Spanish and Latin American cuisines

Maths

Measurements of liquid/solids and volumes.
Estimations and dividing quantities.
Interpreting Data and analysis of quantities
Costings and units of measurements.
Cost of foods and cost of living.

Personal Development

Healthy Eating and the eat well guide.
Foods from around the world
Fitness and effects of food and nutrition on the body
Balanced diet and Healthy choices.
Cost of foods and cost of living.

PE

Energy from Food, Energy transfers and stores.
Fitness and effects of food and nutrition on the body.
Balanced diet and Healthy Eating and choices.

RMT

Research and Analysis of existing products.
Costings of ingredients/materials
Estimations of quantities of materials.
Testing and Evaluation of Final products.

Maths

2D and 3D Shapes and their properties.

Costing/cutting lists/profits

Statistics for example Pie and bar charts and questionnaires.

Measuring instruments and units of measurement.

Measurements for example perimeter, area, radius and diameter.

Computing

Integrating digital technologies in design and prototyping. Utilizing software for computer-aided design (CAD/CAM)

Science

Environmental Issues

Renewable and non renewable energies

Recycling and Reusing products.

Forces and Motion for example pulleys and levers

Properties of materials for example hardness and transparent.

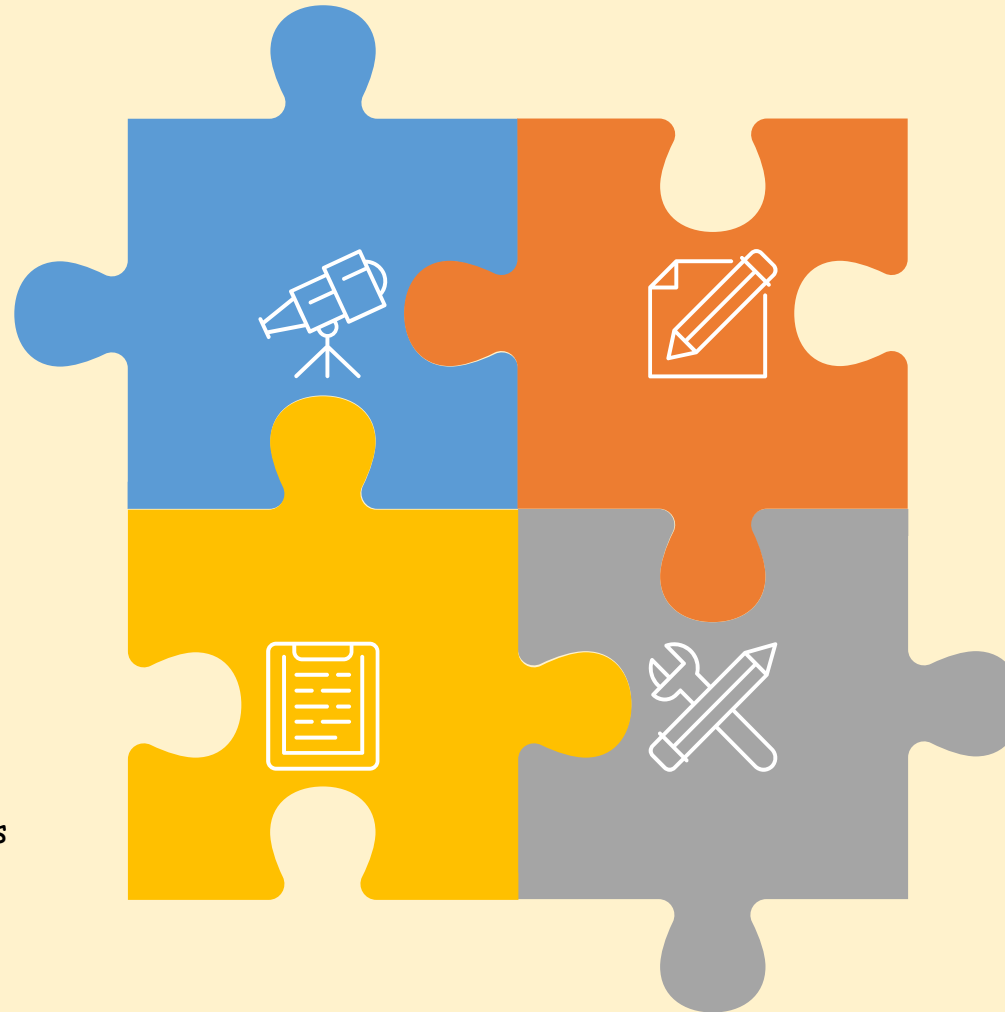
Properties of metals and their uses.

Forces and motion for example friction.

Hot stuff for example heat properties and thermochromatic ink.

Links to wider learning

RMT



Personal Development

Impacts on the environment when designing and making new products.

Sustainability/Recycling/Reusing products and materials.

Environmental issues that affect the planet and how to help reduce this.

Art

Design Ideas and design development. Research and analysis of designers and existing products.

Drawing of 2D and 3D shapes and shading skills.

1 and 2 point perspective drawing and shading techniques.

Layout of page and scale drawings.

Food Technology

Research and Analysis of existing products.

Costings of ingredients/materials

Estimations of quantities of materials.

Testing and Evaluation of Final products.

Subject enhancements Design and Technology

At Oakwood, we believe in providing a comprehensive Design and Technology education that goes beyond the classroom. We recognize the value of subject enhancements, such as trips, in-school visits, projects, theme days, and the inclusion of famous Designers throughout the curriculum. These enhancements aim to deepen students' understanding of a wide range of concepts, foster a love for the subject, and develop crucial real-world skills. By incorporating these activities, we create a holistic learning experience and promote cultural capital among our students.

School Trips/Visits: School visits bring experts and external organizations to our pupils, school trips provide hands-on experiences and both can foster pupils problem-solving skills. The following table showcases the trips/school visits and their focus:

Year	Workshop/Trip	Focus	When
Year 7	Lego machines workshop	Electronic and building skills	Spring Term
Year 8	Chocolate collections workshop	Fair Trade	Autumn term
Year 9	Structures workshop	Triangulation and strength of shapes in structures.	Autumn/Spring Term

Subject enhancements

Projects and Theme Days: Projects and theme days allow students to delve deeper into specific Design and Technology topics and engage in interactive and collaborative activities. The following table highlights the projects and theme days conducted throughout the year:

Year	Theme Day / Project	Focus
Willows to year 9	Fidget Spinner	Designing and Making
Year 10 and 11	Food Truck	Researching and Designing

Inclusion and Cultural Capital: We value inclusivity and aim to provide a diverse and representative curriculum. To celebrate inclusivity, we have incorporated the study of famous Designers throughout the curriculum. The following important figures are interwoven into our lessons:

Year	Past Designer/Inventor	Present Designer/Inventor
Year 7	Peter Durand	Phillip Stark/Ross Lovegrove
Year 8	Rube Goldberg	James Dyson
Year 9	Jaquet Droz	Kai Silverbrook

Year	Past Designer/Inventor	Present Chef/Inventor
Year 7	Clarence Birdseye	Gilbert Ellis Bailey
Year 8	Coenraad Johannes Van Houten	Kevin Ashton
Year 9	Dr. John Stith Pemberton	Ethan Brown

Subject enhancements

Additionally, on Inclusivity Day (March 23rd), students study a famous individual from the Design and Technology field who has overcome challenges to achieve success. This activity aims to inspire students by reflecting their own experiences and the experiences of others in the curriculum.

Year	Designer	Chef
Year 7	Elon Musk	Jamie Oliver
Year 8	Bill Gates	Michael Caine
Year 9	Steve Jobs	Heston Blumenthal

British Values

British Values

- **Extremism and radicalization** - All subject teachers in the department are familiar with the indicators of vulnerability to extremism and radicalization and the procedures for dealing with concerns. When delivering lessons in History we look out for indicators and report any concerns. We work to prevent pupils from developing extreme and radical views by embedding SMSC principles throughout the curriculum.
- **Promoting values** - During lessons we strive to create a learning environment which promotes respect, diversity and self-awareness and equips all of our pupils with the knowledge, skills, attitudes and values they will need to succeed in their future lives.
- **Planning for British Values** - we have looked at all areas of our History curriculum and have pre-planned the coverage of the British values through the topics that we have selected.

Home Learning Policy

- Students have Home Learning packs whereby they can choose a selection of work to complete from a list of given topics. For each year group there a range of tasks to choose from that they will complete over the course of a half term, as part of the Home Learning pack. These are opportunities to extend knowledge, hone skills or recap and retain prior learning.

Technology curriculum - SMSC overview

Oakwood ensures pupils' SMSC development through both implicit teaching and through other aspects of school life.

Social

Investigate moral issues; appreciate diverse viewpoints; participate, volunteer and cooperate; resolve conflict; engage with the fundamental values of British democracy.

Moral

Recognise right and wrong; respect the law; understand consequences; investigate moral and ethical issues; offer reasoned views and have an appreciation of British Values.

Spiritual

Explore beliefs; respect faiths, feelings and values; enjoy learning about oneself, others and the surrounding world; use imagination and creativity; reflect.

Cultural

Appreciate cultural influences; appreciate the role of Britain's parliamentary system; participate in culture opportunities; understand, accept, respect and celebrate diversity

Explicit Technology curriculum opportunities



See Technology curriculum - SMSC overview



See Technology curriculum - SMSC overview



See Technology curriculum - SMSC overview



See Technology curriculum - SMSC overview

World Technology assembly



Themed assembly, leading to opportunities for discussion and reflection.



Themed assembly, leading to opportunities for discussion and reflection



Themed assembly, leading to opportunities for discussion and reflection



Themed assembly, leading to opportunities for discussion and reflection

Technology Star of the Week



Celebrating pupils achievement and building self esteem.



Celebrating pupils achievement and building self esteem.



Celebrating pupils achievement and building self esteem.



Celebrating pupils achievement and building self esteem.

Food / Healthy eating assembly



Themed assembly, leading to opportunities for discussion and reflection.



Themed assembly, leading to opportunities for discussion and reflection.



Themed assembly, leading to opportunities for discussion and reflection.



Themed assembly, leading to opportunities for discussion and reflection.

Whole School Healthy Eating projects



Link with Chartwells for project based learning with focused outcomes.



Link with Chartwells for project based learning with focused outcomes.



Link with Chartwells for project based learning with focused outcomes.



Link with Chartwells for project based learning with focused outcomes.

Homework tasks



Homework opportunities available to all pupils



Homework opportunities available to all pupils



Homework opportunities available to all pupils



Homework opportunities available to all pupils

Technology curriculum - SMSC overview

Oakwood Academy

	Willows/ 7 Curriculum	Year 8/9 Curriculum
<p>Social</p> <p>Investigate moral issues; appreciate diverse viewpoints; participate, volunteer and cooperate; resolve conflict; engage with the fundamental values of British democracy.</p>	<ul style="list-style-type: none"> Explore the changes in society from one period of time to another and highlight their differences. Participate in discussions with others about 'my local area' and what makes it unique 	<p>Discuss the constraints of materials/food products and relevant inventions to the design process and discuss the range of countries which produce products for markets all over the world today</p>
<p>Moral</p> <p>Recognise right and wrong; respect the law; understand consequences; investigate moral and ethical issues; offer reasoned views and have an appreciation of British Values.</p>	<ul style="list-style-type: none"> Appreciate moral and ethical issues when exploring the changes in labels/advertisements/products from one period of time to another and highlight their differences. 	<p>Pupils disassembling a range of manufactured products and food products and discuss problems concerning the recycling of packaging/materials that have fulfilled their use.</p>
<p>Spiritual</p> <p>Explore beliefs; respect faiths, feelings and values; enjoy learning about oneself, others and the surrounding world; use imagination and creativity; reflect.</p>	<p>Wondering at the contribution of past generations to modern manufacturing techniques within the food industry and also where food comes from and how it is made in relation to people faiths.</p>	<p>Pupils to be given the opportunity to react to, reflect on, and wonder at the contribution of past generations to the simplicity and complexity of the (man-made) world and the variety of resources available to them.</p>
<p>Cultural</p> <p>Appreciate cultural influences; appreciate the role of Britain's parliamentary system; participate in culture opportunities; understand, accept, respect and celebrate diversity</p>	<ul style="list-style-type: none"> Identifying and discussing cultural landmarks in key cities to identify different types of structures within society. Wondering at the contribution of past generations to modern manufacturing techniques 	<p>Pupils producing a wide range of food dishes from various cultures and encouraging them to discuss the historical, cultural and geographical contexts that have created this diversity</p>