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 2024
Summary of changes	· 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.
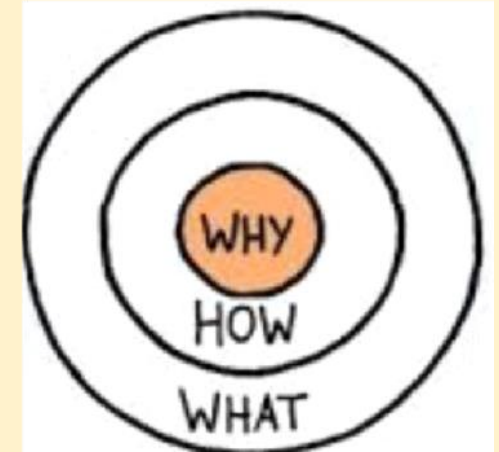
Policy Development (How)

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.

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.

Subjects within Design and Technology

RMT
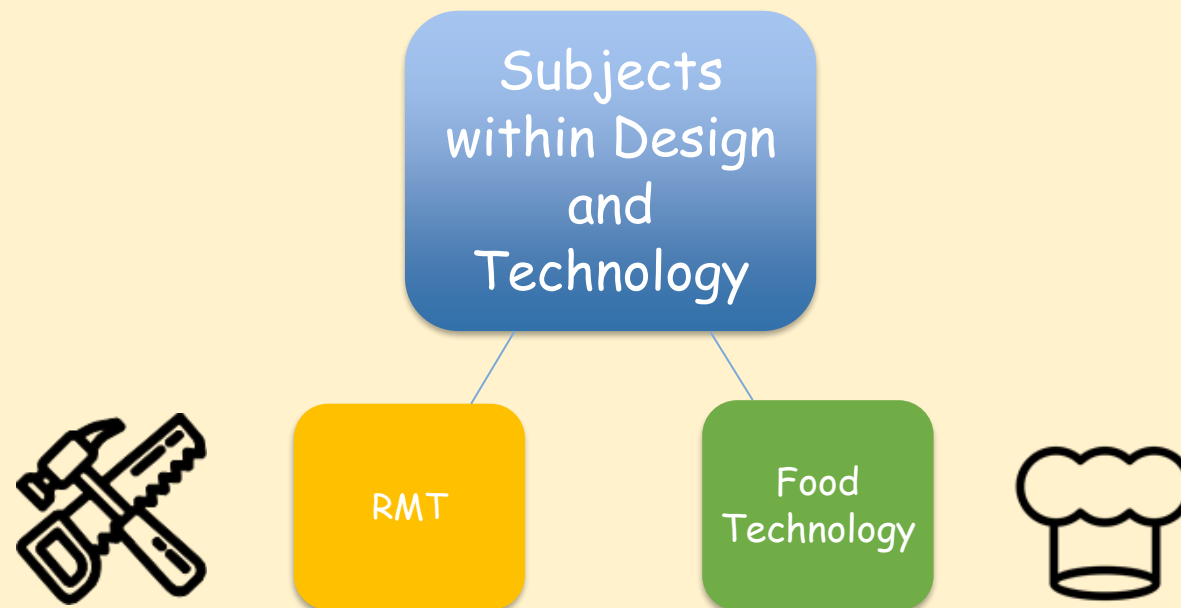
Food Technology

Design and Technology at Oakwood

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.

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.

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 it's 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 is 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 knifes

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:
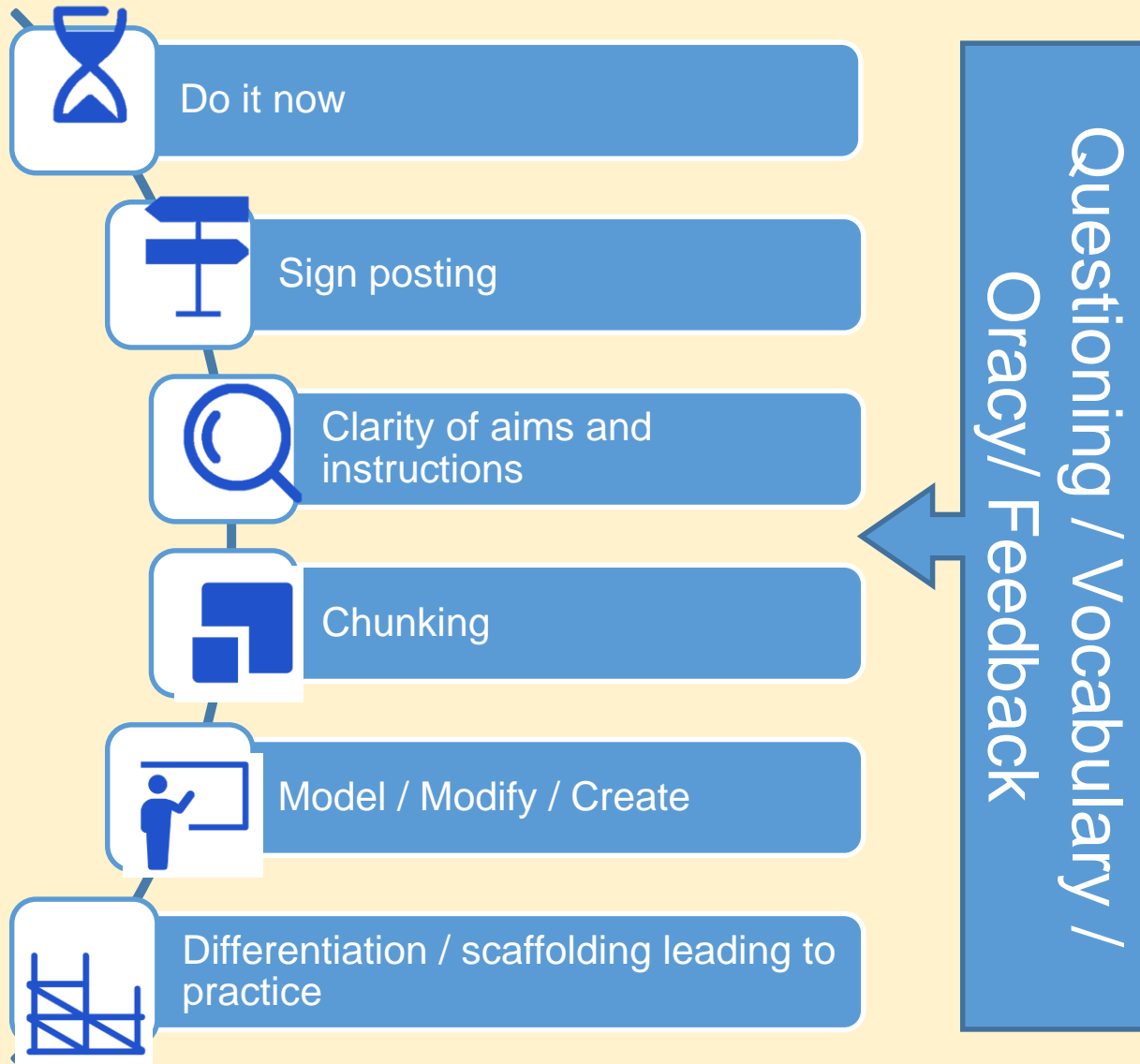
Foundations   Lesson structure

Foundations

Classroom environment		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
Knowing students and developing relationships		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.
High expectations		'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.

Lesson structure

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

Do it now

Sign posting

Clarity of aims and instructions

Chunking

Model / Modify / Create

Differentiation / scaffolding leading to practice

Questioning / Vocabulary / Oracy/ Feedback

Do It Now	• 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	• Signposting cues students in to what they can expect from each stage of their lesson. • It provides them with structure and clarity.
Chunking	• 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	• 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	• We us 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	• 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:
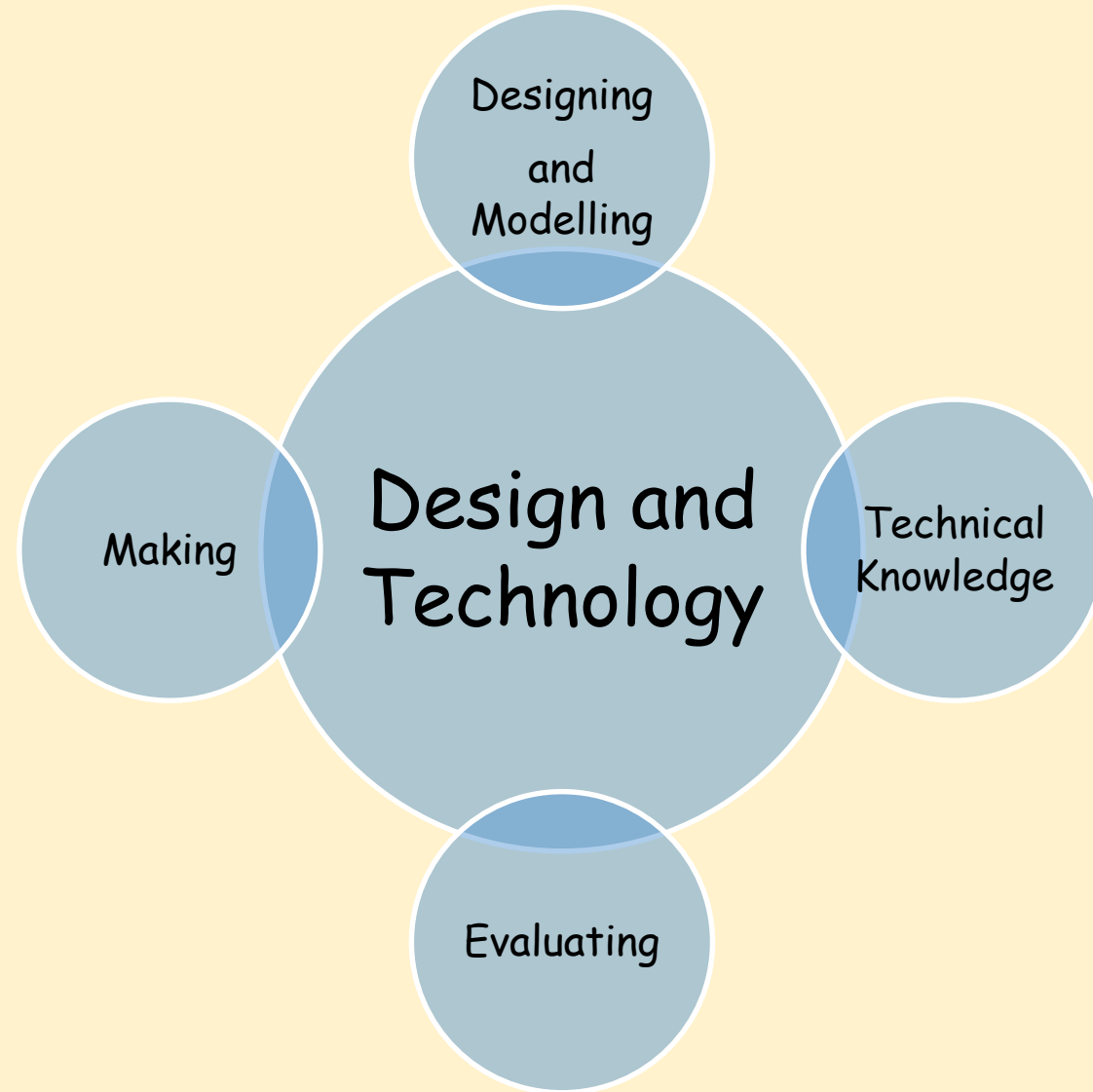
Curriculum Organization

- 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
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.	Confidently select appropriate tools, materials, components and techniques and use them. Use tools safely and accurately Assemble components to make working models Aim to achieve a quality product Demonstrate and make modifications as they go along Construct products using permanent joining techniques.	Understand how mechanical systems work that create movement. Know how to re inforce and strengthen 3D framework Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT. Know how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose	Evaluate their products identifying strengths and areas for development and carrying out appropriate tests. Evaluate their work both during and at the end of the assessment. Record their evaluations using drawings with labels. Evaluate against their original Design Criteria and suggest ways that their product could be improved. Evaluate Key Designs of individuals in design and technology that has shaped the world.

Contexts

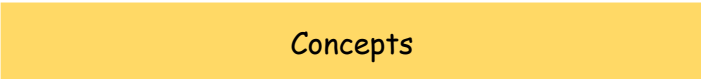| CAM toy	Message Board	Keyring	Birdhouse	Structures		Jigsaw
Photo Stand	Ball bearing Game	Memphis Clock	3D printing	EPV	CAD/CAM	2D design

RMT Curriculum Map

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

Rotation 1 — Photo Frame/Picture Stand

- 🟩 Can think of an idea and identify what to do next
- 🟩 Is able to describe why they have chosen their final design
- 🟨 With support measure and mark out materials to a specific length
- 🟨 Begin to identify some basic tools and what they are used for
- 🟦 Can identify some natural and manmade woods/specific woods.
- 🟦 Selects the correct resources to decorate their product
- 🟦 Can identify some Design criteria that their product must/should/could meet
- 🟥 Can describe with key words what they did to get their finished product
- 🟥 Can identify a good and bad point of their design

Rotation 2 — Jigsaw/Keyring

- 🟩 Can create their own design idea and describe how their idea will work
- 🟩 Can describe to someone else how they are going to make their product
- 🟨 Is able to work safely in the workshop with some basic tools
- 🟨 Identifies the correct tools required for the task and describes some uses
- 🟦 Can identify some machines they have used and their uses
- 🟦 Can identify an advantage and disadvantage of CAD/CAM
- 🟦 Begin to gain knowledge of how to use 2D Design and its tools correctly
- 🟥 Discuss how their product meets their design criteria
- 🟥 Start to talk about changes they have made during the making process

Key

- 🟩 Designing and Modelling
- 🟨 Making
- 🟦 Technical Knowledge
- 🟥 Evaluating

Concepts

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

RMT Curriculum Map

Year 7

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

	Rotation 1		Rotation 2
🟩	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

			Concepts		
🟩	Designing and Modelling				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 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

	Rotation 1		Rotation 2
🟩	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	**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**	**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

Legend

- 🟩 Designing and Modelling
- 🟨 Planning
- 🟦 Making a Product
- 🟥 Health and Safety

Concepts

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

RMT Curriculum Map

Year 11 Entry Pathways

Entry Level 3	Entry Level 3
Autumn	**Spring**

Autumn (Entry Level 3)

- 🟩 Communicate creative design ideas using 2D/3D sketches or drawings
- 🟩 Write a specification for the chosen product
- 🟩 Explain the purpose of the planned product
- 🟨 Record changes to their plan of making
- 🟨 Explain the reasons for changing their plan of making
- 🟦 Select appropriate tools for making their product
- 🟦 Use equipment for making their product in the correct manner
- 🟦 Apply an appropriate finish to the product
- 🟥 Be able to use general workshop machinery under guidance

Spring (Entry Level 3)

- 🟩 Produce a working drawing
- 🟩 Identify the main strengths and weaknesses of their product design
- 🟩 Make suggestions for improvements
- 🟦 Produce a risk assessment for the given situation

Summer

- Course admin and evaluation
- Assessment records
- Catch up missed practical work/coursework

Key

- 🟩 Designing and Modelling
- 🟨 Planning
- 🟦 Making a Product
- 🟥 Health and Safety

Concepts

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

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	Healthy Eating	Practical cooking skills	Food and the environment
• Hazard awareness in the food room • Personal hygiene routines	• Health eating guideline (eatwell guide) • Food labelling • Understanding the dietary needs of people. • Diet related illness • Reducing sugar and fat	• Food preparation • Handling skills	• Where food comes from • Sustainable farming • Reducing food wastage and packaging

Breadth and Depth of the Food Studies 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.

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- 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
- Hazard awareness in the kitchen - Personal hygiene routines	- 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	- Where food comes from - Sustainable farming - Future farming industries - Reducing food waste & packaging	- Food Preparation - Weighing and measuring - Food preparation - blend, core, crush, cut/chop/slice and trim, drain, grate, juice, peel, prove, silt, 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 heathy snacks	Bread project	Food from around the world	Special diets	Party food project

Food Studies Curriculum Map

Willows

Autumn		Spring		Summer
Hygiene and safety	Food choices Food preferences	Consumer awareness Plants and animals	Active lifestyle Taking part	Diet and drink Healthy foods and drinks
Salt Dough (Not For Eating) Oats With Fresh Fruit And Yogurt, Porridge, Cinnamon Toast Crunch, Fruit Salad		Coleslaw, Layered Salad, Sardine Dip, Cream Cheese Dip, Moroccan Carrot Salad		Fruit Kebabs, Apple And Cinnamon Muffins, Bruschetta, Jacket Potatoes, Traffic Light Salad, Mini Pitta Appetisers

Autumn

- 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
- Understand that some foods need to be washed before they are safe to eat (e.g. fruits and vegetables)
- With help and supervision get ready to cook:, tie back long hair, wash and dry hands, put on a clean apron
- With help and supervision, take part in simple clearing up tasks such as clearing and cleaning tables
- Recognise some familiar ingredients (e.g. fruits)
- Describe the tastes of a small range of foods
- With help and supervision, take part in simple clearing up tasks such as clearing and cleaning tables
- Use a table knife for spreading (eg butter on toast)

Spring

- Know that food can be grown or bought from shops
- Know some special foods that are eaten on special occasions
- Know which animals or plants some foods come from (e.g. milk from cows and tomatoes from plants)
- Recite one step of a simple practical skill, such as pouring a drink
- Know that an active lifestyle is good for health.
- Take opportunities to take part in physical activity/sport.
- Chooses to eat socially with others
- Can discuss some of the influences on food we eat (e.g. celebrations , preferences)

Summer

- Recognise that we all need to eat to grow and be healthy
- Be aware that we need to eat more of some foods and less of others
- Recognise the importance of drinking water
- Know the importance of brushing teeth twice a day
- Understand that recipes provide instructions on how to make food
- Describe the taste of some familiar ingredients, using simple words (e.g. sweet, salty)
- Are able to use cutlery to eat a meal
- Identify foods that they like and dislike

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	Food choices Occasions And Seasons	Consumer awareness Where does food comes from?	What is an Active Lifestyle?	Diet and drink Healthy lifestyle
Carrot And Cucumber Sticks, Fruit Smoothies, Rock Buns, Bread Sticks, Couscous			Greek Salad, Fruit Kebabs, Pizza With A Ready Made Base, Apple Crumble, Potato Wedges, Sweet Muffins, Seasonal Apple Salad	

Know that all food comes from plants or animals and can identify some foods from each group and understand how they are grown	Understand that we all need a balanced diet to be healthy and active and need to eat more or less of different foods
Aware that some food packaging has labels giving information	Are beginning to use the Eat well Guide
Know some of the influences on the food we eat (e.g. celebrations, preferences)	Understand the importance of water and drinking water regularly
Understand the importance of not wasting food and know how to recycle packaging	Understand the types of food that can affect the health of teeth
Can follow basic food safety rules when preparing and cooking food	With supervision take part in simple clearing up tasks such as clearing and cleaning tables, collecting and disposing of rubbish, sweeping the floor
Understand how everyday foods are stored differently to ensure they are safe to eat (e.g. fridge or freezer)	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	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	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	Food Choices Advertising and Food Cost	Consumer Awareness Food Production and Processing	Active Lifestyle Health Benefits	Diet and Drink The Eat Well Guide
Couscous, Halloumi Kebabs, Focaccia, Spicy Oven Chips, Dutch Apple Cake			Yogurt And Banana Biscuits, Pizza, Spicy Tomato Soup, Banana Bread, Fish Cakes, Scones	

Rotation 1	Rotation 2
Understand that food is caught or farmed and changed to make it safe and palatable / tasty to eat	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
Understand that people have different views on how food is produced and that this influences the food they buy	Are able to use the Eat well Guide
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 understand appropriate portion sizes for regular meals and healthy snacks
Begin to read and understand food labels	Know the importance of a healthy breakfast
Know and can follow basic food safety rules	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
Understand how bacteria in food can cause food poisoning or food to go mouldy	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
Identify what they would do differently next time to improve what they have made	Recognise and name a broad range of ingredients (e.g. cereals, meat, fish)
Read and follow a simple recipe	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	Food Choices Culture, religion, allergies, and intolerances	Consumer Awareness Sustainability, and seasonality	Active Lifestyle Physical and mental wellbeing	Diet and Drink Food and nutrients
Tomato And Carrot Soup, Pizza, Welsh Cakes, Stir-fry, Short Crust Pastry, Fruit Tarts			Tuna Pasta Bake, Spaghetti Bolognaise, Burgers, Falafel, Apple Sponge Pudding, Red Bean Burger, Full English Breakfast, Shortbread Biscuits	

Rotation 1

- 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

Rotation 2

- 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 Studies Curriculum Map

Year 10

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.

Lemon Drizzle Muffins, Macaroni Cheese, Veggie Chilli Con Carne, Chelsea Buns, Veggie Spaghetti Bolognaise, 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.

Flapjacks, Shepherds Pie, Green Thai Curry, Tuna Pasta Bake, Victoria Sponge Cakes, Eccles Cakes

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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.

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

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.

AC1.2 State typical cooking methods for different commodities.

AC2.1 Prepare, cook and present simple dishes safely and hygienically, using wet and dry methods.

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 records

Catch up missed practical cooking

Catch up coursework

Assessment criteria	
1	2
Lesson objective one	Lesson objective two

Links to wider learning

Technology

English

Exploring subject specific vocabulary in the Technology curriculum.
Opportunities for development of writing and oracy skills through designing and evaluation concepts.

Living in the Wider World

Developing the 'moral conscience' in our students, through focusing upon the moral dilemmas raised in designing and making new products. We teach students to understand the wider impacts on the environment when designing and making new products and expect them to consider carefully the materials & components they will use and include Sustainability/Recycling/Reusing when designing their products.
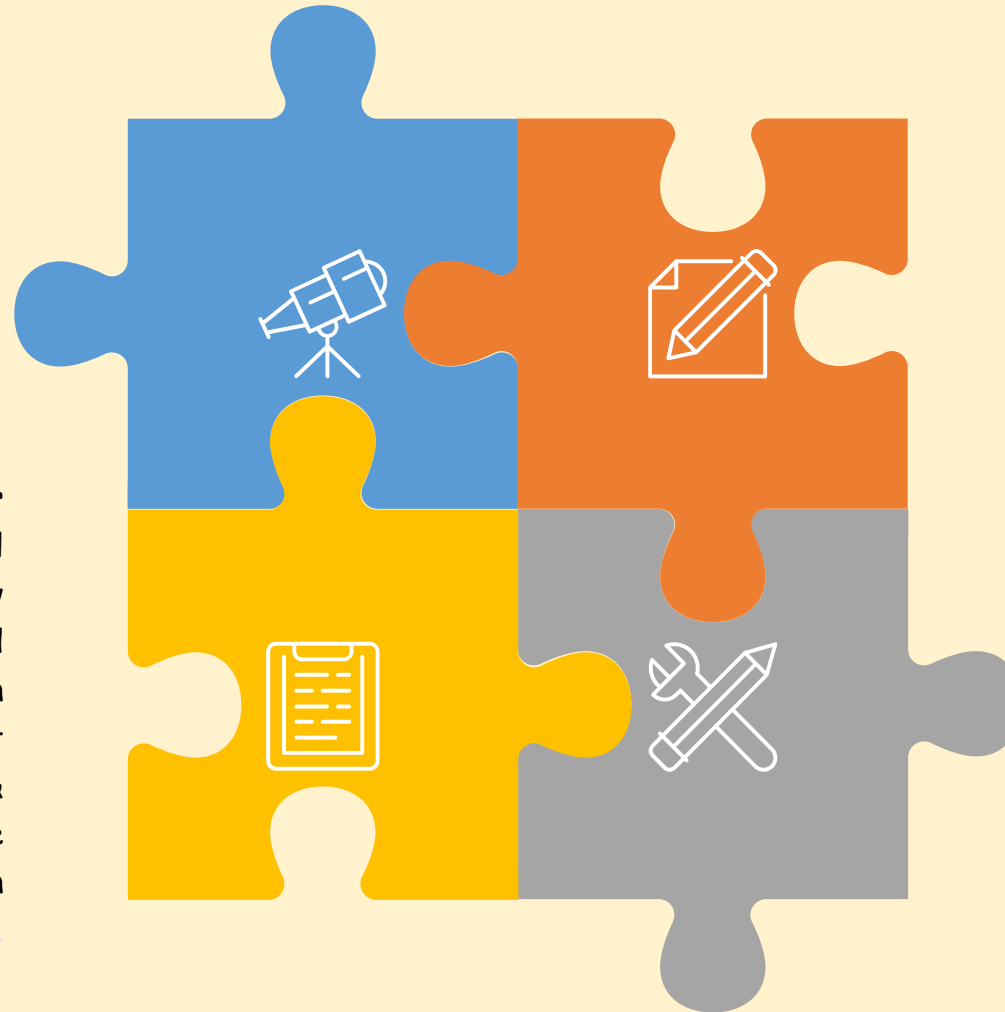
Maths

Money box project- Budgeting and Managing money.

Numeracy links with some focused design specifications (such as weighing, measuring, length and scale)

2D and 3D Shapes

Costing/cutting lists/profits

Cost of foods and cost of living.

Personal Development

Links to Living in the Wider world curriculum:

- Healthy Eating
- Foods from around the world
- Saving the Planet
- Recycling and Reusing products
- The environment and bird population.
- Students are encouraged to reflect on the impact their ideas and existing commercial products have on the rest of society

Subject enhancements

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 RMT and Food Technology	Museum of Science and Industry	Exhibition of the human body	AUT2 – WK 12+/-
Year 8	Manchester Education Centre	Renew hub and Recycling	AUT1/AUT2 – Groups of 20+ WK 8+/-
Year 8 Food technology	Pizza express	Spend the day as a pizzeria specialist	Spring1 – WK 15 +/-
Year 9 (Pathway 1)	Drone Building	Programming skills/engineering/ mechanisms.	Spring1 – WK 15 +/-
Year 9 (Pathway 2)	Legoland	Creating/making/engineering/ Programming skills.	Spring1 – WK 15 +/-
Year 9 Food technology	Chef visit	What to expect from working in the Hospitality industry	SPR2/SUM1 – WK 27 +/-

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	Rube Goldburg	Phillip Stark/Ross Lovegrove
Year 8	Peter Durand	James Dyson
Year 9	Memphis/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	Moral	Spiritual	Cultural
	Investigate moral issues; appreciate diverse viewpoints; participate, volunteer and cooperate; resolve conflict; engage with the fundamental values of British democracy.	Recognise right and wrong; respect the law; understand consequences; investigate moral and ethical issues; offer reasoned views and have an appreciation of British Values.	Explore beliefs; respect faiths, feelings and values; enjoy learning about oneself, others and the surrounding world; use imagination and creativity; reflect.	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
Social Investigate moral issues; appreciate diverse viewpoints; participate, volunteer and cooperate; resolve conflict; engage with the fundamental values of British democracy.	• 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	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
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.	• Appreciate moral and ethical issues when exploring the changes in labels/advertisements/products from one period of time to another and highlight their differences.	Pupils dissembling a range of manufactured products and food products and discuss problems concerning the recycling of packaging/materials that have fulfilled their use.
Spiritual Explore beliefs; respect faiths, feelings and values; enjoy learning about oneself, others and the surrounding world; use imagination and creativity; reflect.	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.	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.
Cultural Appreciate cultural influences; appreciate the role of Britain's parliamentary system; participate in culture opportunities; understand, accept, respect and celebrate diversity	• 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	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