

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>




















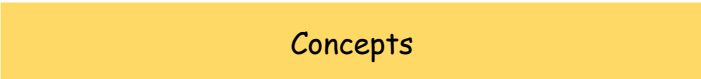



Contexts

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



















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	<p>These concepts have been imbedded into each of the different projects the pupils will undertake throughout the year.</p>	
		Technical Knowledge	
		Evaluating	

RMT Curriculum Map



Year 7

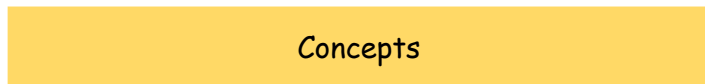
Rotation 1		Rotation 2	
Animated message Board		Ball bearing Game	
Mechanisms/Levers/Linkages/Modelling Recycling/Environment/Cutting/Nailing/Filing/Gluing Decorating		Planning/ Joints/Measuring and Marking/Screwing/Countersink Gluing/Materials/Nailing/Filing/Painting/Decorating/Packaging	
	Start to 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>	
		<p>Technical Knowledge</p> 	
		<p>Evaluating</p> 	

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
	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 key points for manufacturing		Estimate the time required for manufacturing the product
	Identify the main stages of making		Produce/Write a basic plan of manufacture
	Select appropriate materials for the chosen product		Choose appropriate fixing methods
	Explain their choice of materials		Explain their choice of fixing methods
	Identify workshop areas where there may be a hazard or risk		Identify where there may be a hazard or risk when using machines
	Identify where there may be a hazard or risk when using general tools		Identify Health and Safety Symbols
	Designing and Modelling		
	Planning	<p>These concepts have been imbedded into each of the different projects the pupils will undertake throughout the year.</p>	
			
			

Entry Level 3

Autumn

Spring

Summer

Designing and Modelling

Concepts

Making a Product

Planning
















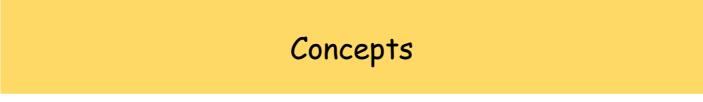



These concepts have been imbedded into each of the different projects the pupils will undertake throughout the year.

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	 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

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
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	Know that food can be grown or bought from shops	Recognise that we all need to eat to grow and be healthy		
Understand that some foods need to be washed before they are safe to eat (e.g. fruits and vegetables)	Know some special foods that are eaten on special occasions	Be aware that we need to eat more of some foods and less of others		
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		
With help and supervision, take part in simple clearing up tasks such as clearing and cleaning tables	Recite one step of a simple practical skill, such as pouring a drink	Know the importance of brushing teeth twice a day		
Recognise some familiar ingredients (e.g. fruits)	Know that an active lifestyle is good for health.	Understand that recipes provide instructions on how to make food		
Describe the tastes of a small range of foods	Take opportunities to take part in physical activity/sport.	Describe the taste of some familiar ingredients, using simple words (e.g. sweet, salty)		
With help and supervision, take part in simple clearing up tasks such as clearing and cleaning tables	Chooses to eat socially with others	Are able to use cutlery to eat a meal		
Use a table knife for spreading (eg butter on toast)	Can discuss some of the influences on food we eat (e.g. celebrations , preferences)	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	
<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	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	

Understand some of the basic processes to get food from farm to plate	Understand the main food groups and the different nutrients that are important for health
Understand social influences on the food we choose to eat (e.g. media, peer pressure, ethics)	Are able to make food choices taking in to consideration the Eat well Guide
Understand some of the ethical dilemmas associated with the food people choose to buy	Know appropriate portion sizes and the importance of not skipping meals, including breakfast
Independently use information on food labels to inform my choice	Independently compare different versions of the same dish and identify how they would change the recipe next time
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 (e.g. keep raw meats away from other food)
Independently demonstrate good food safety practices when getting ready to store, prepare and cook 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	Identify how they would change the recipe to improve the food they have made
Independently read and follow a recipe	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 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.

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.

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.	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