

# KS3 CAROUSEL SCHEME OF WORK 2020 2021

		Y7 PROJECT 1 (Design & Technology)	Y7 PROJECT 2 (Engineering)	Y7 PROJECT 3 (Combined skills)	Y7 PROJECT 4 (Food & Nutrition)
W1	Welcome lesson for all carousel groups...What is Design & Technology				
W2	Health and Safety introduction – How can we work safely?				
YEAR 7	1	<b>Cookie Cutter project</b> -Project introduction / Researching -Set homework -Researching teacher feedback	<b>Novelty light project</b> -Project introduction / Researching -Set homework -Researching teacher feedback	<b>Helicopter launcher project</b> -Project introduction / Researching -Set homework -Researching teacher feedback	<b>Getting to know the food room</b> -Knowing correct hygiene in a food room. Discussing hazards that may occur -Health and safety homework
	2	-Review H/W -Researching student response -Improvement/completion of research -Designing former	-Review H/W -Researching student response -Improvement/completion of research -PCB drilling in small groups	-Review H/W -Researching student response -Improvement/completion of research	<b>Fruit and Vegetables</b> -Discussing the benefits of fruits and vegetables in our diets.-Demo of Apple Crumble -Remember container to take home dish
	3	-Designing/developing former -Designing teacher assessment level	-Designing acrylic diffuser -Designing/developing acrylic diffuser -PCB drilling in small groups -Designing teacher assessment level	-Setting up the template -Assembling the handle layers	<b>Fruits and vegetables</b> -Make Apple crumble
	4	-Drawing former template -Shaping MDF former	-Circuit assembly	-Cutting the handle shape -Filing the handle	<b>Fruits and Vegetables</b> -Evaluate creating apple crumble and fruits and vegetables
	5	-Shaping MDF former -Finishing MDF former	-Press form cover/drill/profile cut cover	-Finishing the handle	<b>Milk and dairy</b> -Discuss health benefits of milk and dairy in the diet - Demo smoothie -Remember bottle to take smoothie home in
	6	-Vacuum forming -Profile cutting	-Complete press forming and drilling -Shaping plywood base -Preparing threaded rod	-Assembling the launcher	<b>Milk and dairy</b> -Make smoothie -Evaluate creating smoothies and dairy products
	7	-Profile cutting -Finishing	-Final assembly of base, threaded rods, circuit and cover	-Production diary -Testing the toy -Production diary teacher feedback	<b>Starchy carbohydrates</b> -Discuss health benefits of carbohydrates in the diet - Demo pizza -Remember a container to transport pizza
	8	-Production diary -Production diary teacher feedback	-Production diary -Production diary teacher feedback	-Production diary student response -Packaging design	<b>Starchy carbohydrates</b> -Make pizza
	9	-Production diary student response -Packaging manufacture	-Production diary student response -2D Designer acrylic diffuser design	-Packaging manufacture	<b>Starchy Carbohydrates</b> -Evaluate creating pizza and carbohydrates
	10	-Evaluating -Evaluating teacher feedback	-Complete 2D Designer acrylic diffuser design -Laser cut acrylic diffusers	-Evaluation -Evaluating teacher feedback	<b>Meat and other proteins</b> -Discuss health benefits of protein in the diet and its sources. -Demo fajitas - Remember a container for fajitas
	11	-Evaluating student response -Improvement and completion of evaluations -Set homework	-Strip heat acrylic diffuser -Final assembly -Set homework	-Evaluating student response -Improvement and completion of evaluations -Set homework	<b>Meat and other proteins</b> -Make fajitas
	12	-Review H/W -End of project assessment	-Review H/W -End of project assessment	-Review H/W -End of project assessment	<b>Meat and other proteins and cookie cutters</b> -Evaluate creating fajitas and proteins -Use ready made cookie dough and use their cookie cutters

	Y8 PROJECT 1 (Design & Technology)	Y8 PROJECT 2 (Engineering)	Y8 PROJECT 3 (Combined skills)	Y8 PROJECT 4 (Food & Nutrition)
W1	Welcome lesson for all carousel groups...Carousel overview and setting up folders			
W2	Health and Safety refresher -			
1	<b>Chocolate mould project</b> -Project introduction / Researching -Set homework -Researching teacher feedback	<b>USB LED light project</b> -Project introduction / Researching -Set homework -Researching teacher feedback	<b>Cube calendar project</b> -Project introduction / Researching -Set homework -Researching teacher feedback	<b>Getting to know the food room again</b> -Knowing correct hygiene in a food room. Discussing hazards that may occur -Talking through the Eatwell guide. -Health and safety homework
2	-Review H/W -Researching student response -Improvement/completion of research -Mind map theme ideas	-Review H/W -Researching student response -Improvement/completion of research -Designing base/top layer(Drilling PCB)	-Review H/W -Researching student response -Improvement/completion of research -Calendar theme ideas	<b>Fruit and Vegetables</b> -Discussing the benefits of fruits and vegetables in our diets. -Demo of Apple dutch cake -Remember container to take home dish
3	-Designing former top layers -Development of former top layers -Designing teacher assessment level	-Developing top/bottom layers -Creating templates (Drilling PCB) -Designing teacher assessment level	-Development of calendar ideas -Designing teacher assessment level	<b>Fruit and Vegetables</b> -Make apple dutch cake
4	-Base former-filing draft angles	-Circuit assembly	-Cutting pine frame parts	<b>Fruit and Vegetables</b> -Evaluate creating dutch apple cake and fruits and vegetables
5	-Shaping top layer in card	-Gluing templates to pine & MDF -Shaping/drilling base layer	-Completing cutting -Gluing pine frame to MDF base	<b>Milk and dairy</b> --Discuss health benefits of milk and dairy in the diet -Demo cheesecake -Remember a container to create cheesecake in
6	-Vacuum forming -Profile cutting	-Shaping top layer -Drilling top layer	-Backdrop production (2D Des)	<b>Milk and dairy</b> -Create cheesecake -Evaluate creating cheesecake and dairy products
7	-Profile cutting -Finishing edges	-Completing shaping/drilling of layers	-Production diary -Production diary teacher feedback	<b>Starchy carbohydrates</b> -Discuss health benefits of carbohydrates in the diet. -Demo pasta bake -Remember a container to transport pasta bake home in
8	-Production diary -Production diary teacher feedback	-Production diary -Production diary teacher feedback	-Production diary student response -Cutting/shaping backdrop	<b>Starchy carbohydrates</b> -Create pasta bake
9	-Production diary student response -Completion of moulds	-Production diary student response -Paper shade production	-Sanding cubes -Varnishing cubes	<b>Starchy carbohydrates</b> -Evaluate pasta bake and carbohydrates
10	-Evaluation -Evaluation teacher feedback	-Final assembly/cutting dowels -Evaluating -Evaluating teacher feedback	-Completing calendar / Evaluation -Evaluating teacher feedback	<b>Meat and other proteins</b> -Discuss health benefits of protein in the diet and its sources. - Demo burgers - Remember a container for burgers
11	-Evaluation student response -Packaging design/manufacture	-Evaluating student response -Improvement and completion of evaluations	-Evaluating student response -Improvement and completion of evaluations	<b>Meat and other proteins</b> -Create burgers
12	-End of project assessment	-End of project assessment	-End of project assessment	<b>Meat and other proteins &amp; use chocolate moulds</b> -Use chocolate moulds created in other project -Evaluate and assess burgers and protein knowledge

		Y9 PROJECT 1 (Design & Technology)	Y9 PROJECT 2 (Engineering)	Y9 PROJECT 3 (Combined skills)	Y9 PROJECT 4 (Food & Nutrition)
YEAR 9	W1	Welcome lesson for all carousel groups...Carousel overview and setting up folders			
	W2	Health and Safety refresher – What is a risk assessment?			
	1	<b>Design styles clock project</b> LO: What does the project involve? How have design styles changed throughout history? -Project introduction -Product design timeline task <b>-Set researching homework</b>	<b>Pewter casting project</b> LO: What does the project involve? Where do metals come from? -Project introduction / Researching <b>-Set researching homework</b>	<b>Sweet dispenser project</b> LO: What does our project involve? What is the environmental impact of products? -Project introduction / Writing a specification <b>-Set researching homework</b>	LO: Knowing correct hygiene in a food room. Discussing more complex skills the students will be learning this year. <b>-Health and safety homework</b>
	2	LO: What is a design style? How have design styles influenced products? <b>-Review H/W</b> <b>-Researching student response</b> -Product analysis task -Generating theme ideas <b>-Researching teacher assessed level</b>	LO: What are the properties and applications of metals? What are appropriate themes for my product? <b>-Review H/W</b> <b>-Researching teacher feedback</b> -Improvement/completion of research -Generating theme ideas	LO: How effective are existing sweet dispensers? How do we analyse a product? <b>-Review H/W</b> -Exploring existing sweet dispensers -Product analysis task	<b>Fruits and Vegetables - Breakfast muffins</b> -Demo of making Breakfast muffins - Discuss why breakfast is important. <b>- students to remember containers for muffins</b>
	3	LO: How can I present my design ideas? -Generating design ideas -Development of chosen idea <b>-Designing/developing teacher assessed level</b>	LO: How can I present my design ideas? <b>-Researching student response</b> -Generating design ideas	LO: What are the 6R's of sustainability? -Researching the 6R's. Sustainability of products task. -Exploring theme ideas mind-map task. <b>-Researching teacher feedback</b>	LO: Creating breakfast muffins -using knife skills on fruit or veg -using mixers to create the all in one method -Correct use of oven -Checking for readiness -cleaning work stations
	4	LO: How can I develop my idea? <b>-Designing student response</b> -Improvement of ideas/development	LO: How can I develop my idea? -Improvement of ideas/development <b>-Designing/developing teacher assessed level</b>	LO: How can I present my design ideas? <b>-Researching student response</b> -Generating design ideas -Development of chosen idea	LO: Evaluating breakfast muffins. -strengths and targets -discussing alternatives
	5	LO: What makes a successful former? -Drawing former template by hand -Gluing template to 12mm MDF layer -Cutting demonstration	LO: How can I draw my mould layer using 2D Designer? -Drawing mould layer using 2D Designer -Saving mould layers ready to cut. <b>-Laying out mould layers and cutting ready for next lesson</b>	LO: How can I develop my idea and present my final design? -Further development and presentation of final design. <b>-Designing/developing teacher feedback</b>	<b>Milk and Dairy - Cauliflower cheese</b> LO: What do dairy products do for our bodies and where do we get them from? -What is lactose intolerant? -Watch a demonstration on creating cauliflower cheese <b>-Remember a food container</b>
	6	LO: How can I cut and shape my former? -12mm MDF Former layer cutting -Shaping, adding draft angle and finishing 12mm former layer	LO: What is the casting process? How is it carried out? -Pewter casting demonstration -Casting research activity -Casting the pewter products	LO: How can I mark out and cut my mechanism parts? -Marking up mechanism parts -Cutting parts to length and drilling	LO: Creating cauliflower cheese -Using cutting techniques -Creating a cheese sauce -Grilling combined cauliflower and cheese.
	7	LO: What finishing techniques can I use? -Completion of 12mm base former layer -Addition of card detail and decorative former layers	LO: How can I smooth and finish my pewter product? -Smoothing and finishing pewter cast product -Drilling holes for chord	LO: How do I assemble the mechanism? -Finishing of mechanism parts -Assembly of mechanism	LO: Evaluating creating cauliflower cheese. -recapping dairy knowledge -Discussing alternative ways of creating the dish
	8	LO: What is the vacuum forming process? -Finishing and completion of MDF former -Vacuum forming demonstration	LO: What are the stages of making my product? <b>-Designing student response</b> -Planning the making task <b>-Planning teacher feedback</b>	LO: What are the stages of making my product? <b>-Designing student response</b> -Planning the making task <b>-Planning teacher assessed level</b>	<b>Cereals and starches - Quiche</b> LO: Watch a demonstration on creating short crust pastry. -discussing setting agents for quiche filling (coagulation) -Learn about blind baking <b>- Remember a food container</b>
	9	LO: What are the stages of making my product? -Planning the making -Continuation of vacuum forming -Profile cutting HIPs clock shell <b>-Planning teacher feedback</b>	LO: How can I smooth and finish my pewter product? -Continuation of smoothing and finishing pewter cast product -Drilling holes for chord	LO: How can I cut and shape my base? -Cutting and shaping the base for the product and drilling -Assembly of mechanism and base and fitting of bottle	LO: Creating quiche -Making own pastry -Making quiche mixture -Adding additional ingredients if brought in too.
10	LO: What finishing processes can be used on our clock? -Finishing the edges of the HIPs forming -Drilling and adding clock mechanism -Addition of vinyl (pre-cut numbers and hand cut parts)	LO: What is the buffing process? -Completion of smoothing and final buffing of pewter -Completion of drilling and addition of key-ring/chord	LO: How can a flow chart be used in planning? -Production plan flowchart <b>-Planning teacher feedback</b>	LO: Evaluating creating their quiche -How did the pastry turn out -Could it be improved? -How could it be adapted for someone who was gluten free?	

11	<p>LO: How did you manage safety and your time? How can you show this on your plan?</p> <ul style="list-style-type: none"> <li>-Vinyl addition and completion of clock</li> <li>-Photographing completed product/adding photo to booklet -Completion of clocks</li> </ul> <p><b>-Making teacher assessed level</b></p>	<p>LO: How did you manage safety and your time? How can you show this on your plan?</p> <p><b>-Planning student response</b></p> <ul style="list-style-type: none"> <li>-Completion of production plans</li> <li>-Photographing completed product/adding photo to booklet</li> </ul> <p><b>-Making teacher assessed level</b></p>	<p>LO: How did you manage safety and your time? How can you show this on your plan?</p> <p><b>-Planning student response</b></p> <ul style="list-style-type: none"> <li>-Completion of production plans</li> <li>-Making sweet dispenser backboard</li> <li>-Photographing completed product/adding photo to booklet</li> </ul> <p><b>-Making teacher assessed level</b></p>	<p><b>Beans, Pulses, Fish, Meat and other Proteins - Chicken stir-fry</b></p> <p>LO: Watching a demonstration on creating chicken stir-fry</p> <ul style="list-style-type: none"> <li>-Discussing minimalizing cross-contamination</li> <li>-Talking about protein in the diet and alternatives for people who don't eat meat</li> </ul> <p><b>-Remembering a food container</b></p>
12	<p>LO: How effective was your product?</p> <p><b>-Planning student response</b></p> <ul style="list-style-type: none"> <li>-Evaluation</li> </ul> <p><b>-Evaluation teacher feedback</b></p>	<p>LO: How effective was your product?</p> <ul style="list-style-type: none"> <li>-Evaluation</li> </ul> <p><b>-Evaluation teacher feedback</b></p>	<p>LO: How effective was your product?</p> <ul style="list-style-type: none"> <li>-Evaluation</li> </ul> <p><b>-Evaluation teacher feedback</b></p>	<p>LO- Creating Chicken stir-fry</p> <ul style="list-style-type: none"> <li>-Knowing the different chopping boards and knives for meat and vegetables</li> <li>- Being safe with a wok</li> <li>-knowing when the meat is cooked</li> </ul>
13	<p>LO: How could your product be improved?</p> <p><b>-Evaluation student response</b></p> <ul style="list-style-type: none"> <li>-Improvement of evaluations</li> </ul> <p><b>-End of project assessment</b></p>	<p>LO: How could your product be improved?</p> <p><b>-Evaluation student response</b></p> <ul style="list-style-type: none"> <li>-Improvement of evaluations</li> </ul> <p><b>-End of project assessment</b></p>	<p>LO: How could your product be improved?</p> <p><b>-Evaluation student response</b></p> <ul style="list-style-type: none"> <li>-Improvement of evaluations</li> </ul> <p><b>-End of project assessment</b></p>	<p>LO: Evaluating making their chicken stir-fry</p> <ul style="list-style-type: none"> <li>-Were the correct chopping skills used</li> <li>-How was the flavouring</li> <li>-What protein alternative could be used instead?</li> </ul>