## **AQA** Food Preparation and Nutrition

## Assessment Opportunities Assessment

Students will be assessed through non-exam assessment and exam assessment. All assessed pieces are outlined within this SOL.

#### Non-exam assessment 50%

This is broken down into two parts:

**Task 1: Food Investigation (15%)** – students will investigate the working characteristics, functional and chemical properties of ingredients and produce a written report.

## Task 2: Food preparation Assessment

(35%) – students will prepare, cook and present a final menu of three dishes within three hours.

#### Exam assessment 50%

There will be one final examination, which is 50% of the final grade.

## Literacy/Reading opportunities

- Reading recipes
- Reading and matching key tools and definitions
- Reading methods and key terminology
- Reading rules of the room and being able to write about the importance of safety rules in dt - verbally and written.
- Time plans

### **CEIAG** Links

This provides a good foundation for courses or employment which involve food preparation, cooking or food manufacture. This GCSE also assists students with an interest in sports careers such as coaching or personal training, health care/medicine and child care due to the nutrition aspect of the course.

## Curriculum vision:

"Our aim is to deliver a curriculum that is inclusive, relevant and progressive for all learners."















# Year 10 AQA Food preparation and nutrition

## Term 2

• Careers- nutritionist, dietician, chef, hospitality roles for example in hotels, food taster, food sensory taster and developer, supermarket food developer.

## Year 10 term 2 Aims / Objective:

## 3.3 Food science

- 3.3.2.5 Raising agents
- 3.3.1 Cooking of food and heat transfer
- 3.3.1.2 Selecting appropriate cooking methods
- 3.3.2 Functional and chemical properties of food
- 3.3.2.1 Proteins
- 3.3.2.2 Carbohydrates
- 3.3.2.3 Fats and oils

## 3.5.3 Sensory evaluation

NEA 1 practice - Food investigation task

TITLE OF UNIT: Year 10	NC Attainment: Grades 1 to 9	Level(s): KS4
Term: Spring Term		

Literacy skills: Reading recipes, charts and tables.

**Keywords: tier 2/3** 

Raising agents chemical (baking powder, bicarbonate of soda, selfraising flours which produce carbon dioxide) • mechanical (whisking, beating, folding, sieving, creaming and rubbing in – all incorporate air into the mixture) • steam is produced when the water in any moist mixture reaches boiling point • biological (yeast)

**Food Science** *Protein* denaturation protein coagulation gluten formation foam formation. Gluten, gliadin, gluten formation, mixing, kneading, proving, fermentaion, knock back, shaping, baking coagulation

**CHO:** gelatinisation, dextrinisation, caramelisation.

Fat: shortening, aeration, plasticity, emulsification.

Cooking methods: Conduction, convection, radiation.

Moist cooking methods, cooking- boiling simmering, brasing, stewing, poaching, steaming Dry cooking methods - baking, grilling, dry frying, toasting and cooking in oil - shallow frying, sautéing, stir frying, roasting deep fat frying.

#### **Resources:**

e book one line access by every student, laminated recourses for vitamins,

## **Numeracy skills:**

Working out weights and measures for ingredients. Doubling recipes and making them smaller.

### Use of ICT:

Nutritional analysis, costing on excel, completing NEA on word,

- Students have their year 10 Mocks which will test the next unit of knowledge and previous knowledge
- At the end of term they will be completing a practice NEA FIT

Assessment: practical or/both theory assessment every 3 weeks.

NEA 1 practice will form part of the assessment year 10 end of year grade.

## Links with other curriculum areas

These issues underlie all design and manufacturing activities and will be specifically addressed in identifying needs, researching different areas, justifying choices and evaluating outcomes. All of these areas ensure that there is adequate scope for covering these aspects of the course.

## **Specification Coverage**

(AQA 8585)

Week 1: Lesson 1: Practical - Cake making	Skill 1: General practical skills	Differentiation:	Homework:	Resources:
Objectives:  To learn about the different cake making methods.	Skill 4: Use of the cooker  Skill 5: Use of equipment hand held mixers, Kenwood.	Basic: Scone rubbing in method  Medium: brownies	To complete the caking making worksheet and questions on	Trolleys, knifes, Tea towels, dish clothes,

Key Word:		Complex: Victoria Sponge piped a filling	resources due in half term	oven gloves.
Whisking, Rubbing in, Melting, Creaming		Sponge piped a minig	nan term	Greaseproof
				Cake tins
Lesson 2: Theory Raising Agents	3.3.2.5 Raising agents	Differentiation	Homework:	Resources:
Objectives:			To bring ingrediens to	
<ul> <li>the scientific principles underlying these processes when preparing and cooking food</li> <li>the working characteristics, functional and chemical properties of raising agents.</li> </ul>			<ul> <li>make a cake that</li> <li>melting method</li> <li>rubbing in</li> <li>Creaming</li> </ul>	A3 note sheet in resources.
Key Words:				
Biological raising agents - yeast, chemical raising agents - bicarbonate of soda, baking powder Mechanical raising agents - Air, steam				
Week 2: Lesson 1: Practical: Choux Buns	Skill 1: General practical skills	Differentiation	Homework:	Resources
Objectives:	Skill 4: Use of the cooker			
<ul> <li>To learn how to make choux pastry.</li> <li>Use a strong flour talk about gluten formation</li> </ul>	Skill 5: Use of equipment - microwave melt chocolate  Skill 10: Dough choux pastry	Basic: much help not risen uneven sizes	Complete some of the raising agent worksheet.	Trolleys, knifes, Tea towels,
Key Words:	, , , , , , , , , , , , , , , , , , , ,	Medium: little help good size even coating	WOIRSHEEL.	dish clothes,

Bain maire, microwave,	Skill 11: Raising agents - steam	of chocolate.		oven gloves.
		Complex: Even size good coating of chocolate and filling.		
Lesson 2: Theory Food Science: Protein	3.3.2.1 Proteins	Differentiation	Homework:	Resources
Objectives:				
<ul> <li>the scientific principles underlying these processes when preparing and cooking food</li> <li>the working characteristics, functional and chemical properties of proteins.</li> <li>Demonstrate how to use the Kenwood when whisking eggs</li> <li>Learn the functions of eggs in cooking</li> </ul>			Bring ingredients:  To make choux buns	Print out starter questions
Key Words:  Denaturation, protein coagulation, foam formation.			Complete brainstorm of protein food science	Food: Eggs
Week 3: Lesson 2 Practical: Chilled lemon Tart	<b>Skill 1:</b> General practical skills	Differentiation	Homework:	Resources
Objectives:	Skill 3: Preparing fruit zesting and juicing.  Skill 5: Use of equipment hand	<b>Basic:</b> Layers in the pudding are not even	Complete worksheet on	Trolleys,

<ul> <li>Students making a chilled lemon tart to demonstrate, denaturisation of protein with an acid and agitation and sweetening by sugar</li> <li>Key Words:</li> <li>Complex carbohydrate, NSP Fibre</li> </ul>	held blender, kenwood  Skill 9: Acids denature protein  Skill 12: Setting mixtures	too much biscuit. No decoration  Medium:  Complex: Even layers, piped cream on top and good decoration	raising agents.	knifes, Tea towels, dish clothes, oven gloves.
Lesson 2: Theory Protein Science Gluten	3.3.2.1 Proteins	Differentiation	Homework:	Resources
<ul> <li>Objectives:         <ul> <li>Teach students how to make bread using the kenwood, proving in top oven</li> <li>Go through technical words.</li> <li>Students to complete worksheet.</li> </ul> </li> <li>Key Words:         <ul> <li>Glutenen, gliadin, gluten formation, mixing, kneading, proving, fermentaion, knock back, shaping, baking coagulation</li> </ul> </li> <li>Assessment: practical</li> <li>Personal hygiene, work space organization. Kneading skills and science behind yeast and fermentation</li> </ul>			Bring ingredients to make a complex bread product as they have made bread in KS3	Bread ingredients  Making bread worksheet

Week 4: Lesson 1: Practical Bread	Skill 1: General practical skills	Differentiation	Homework:	Resources
Objectives:	Skill 4: Use of the cooker			
<ul> <li>To make a shaped and flavoured bread product. Star bread, plaited,</li> <li>Key Words:</li> <li>Mixing, kneading, proving, shaping,</li> </ul>	Skill 5: Use of equipment  Skill 7: Prepare, combine and shape  Skill 10: Dough bread  Skill 11: Raising agents yeast	Ideas star bread Plaited		Trolleys, knifes, Tea towels, dish clothes, oven gloves.
Lesson 2: Theory Food Science Carbohydrates.	3.3.2.2 Carbohydrates	Differentiation	Homework:	Resources
Objectives:				
<ul> <li>the scientific principles underlying these processes when preparing and cooking food</li> <li>the working characteristics, functional and chemical properties of carbohydrates.         <ul> <li>I demonstrate gelatinization using flour and water.</li> </ul> </li> <li>Go though other functions of starch and sugar.</li> <li>Key Words:         <ul> <li>gelatinisation, dextrinisation, caramelisation.</li> </ul> </li> <li>Memory Technique: Get Dees Car</li> </ul>			Complete brainstorm of CHO science  Bring ingredient to make palmiers .	Print out starter questions  Worksheet on gelatinization.  Demonstration for gelatinization I use flour and water.

Week 5: Practical - Palmiers	Skill 1: General practical skills	Differentiation	Homework:	Resources
Objective:	Skill 4: Use of the cooker			
Learn how to make rough puff pastry.	Skill 7: Prepare, combine and			Trolleys,
Make them into palmiers	shape			knifes,
	Skill 10: Dough rough puff		Complete work	Tea towels,
Key Words:	pastry		on raising agents.	dish clothes, oven gloves.
Palmiers, rubbing in, folding and shaping				
				Baking trays
Lesson 2: Theory Food Science Fats	3.3.2.3 Fats and oils	Differentiation	Homework:	Resources
Objectives:				
the scientific principles underlying these processes when				Print out starter
preparing and cooking food			Students must	questions
the working characteristics, functional and chemical     properties of fats and oils			complete the	
<ul><li>properties of fats and oils.</li><li>Go through the other functions of fat in cooking</li></ul>			raising agent booklet to hand	
es un sugniture surren rumations of fue in securing			in next lesson.	
Key Words:				
aeration, plasticity, shortening, emulsification.			Bring ingredients	
Mamony Tophyimyo, Aymyy places short arealla			for Lemon	
Memory Technique: Army please short emails			meringue pie	
Week 6: Lesson 1: Practical Lemon Meringue pie	Skill 1: General practical skills	Differentiation	Homework:	Resources
L				

Objectives:	Skill 4: Use of the cooker			
<ul> <li>Learn how to make lemon meringue pie.</li> <li>Blind bake.</li> <li>Look at the science behind the ingredients of making lemon meringue pie.</li> </ul> Key Words:	Skill 5: Use of equipment hand held mixer  Skill 7: Prepare, combine and shape  Skill 8: Sauce making - curd	Basic: Will buy a pasty base. Sauce too runny or too thick  Medium: Make pastry at home and blind bake at home		Trolleys, knifes, Tea towels, dish clothes, oven gloves.
Shortening, blind baking, Denaturization, coagulation, foam,	Skill 12: Setting mixtures curd	Complex: Make pastry at home and blind bake at school		
Lesson 2: Theory Cooking Methods	3.3.1 Cooking of food	Differentiation	Homework:	Resources
Objectives:	and heat transfer			Print out cooking
<ul> <li>the reasons why food is cooked</li> <li>the different methods of heat transfer.</li> <li>students to look at how propagation and cooking affect the</li> </ul>	3.3.1.1 Why food is cooked and how heat is		Divide class into 2	methods worksheet
<ul> <li>students to look at how preparation and cooking affect the appearance, colour, flavour, texture, smell and overall palatability of food.</li> </ul>	transferred to food		Bring ingredients to make	Food cooking
Key Words:  Conduction, convection, radiation. Moist cooking methods, cooking-boiling simmering, braising, stewing, poaching, steaming Dry cooking methods - baking, grilling, dry frying, toasting and cooking in oil - shallow frying, sautéing, stir frying, roasting deep fat frying.	3.3.1.2 Selecting appropriate cooking methods		A rough puff pastry dish sausage rolls sausage plait or jalousie     Pasta	task in resource blow these up to A3

Assessment: cooking methods theory and practical cooking methods and heat transfer  Week 7: Lesson 1: Practical  Objectives:  Learn how to use a pasta machine and make pasta Learn how to make different pasta shapes.  Learn how to fresh cook pasta  Key Words:	Skill 1: General practical skills  Skill 5: Use of equipment pasta machine  Skill 6: Cooking methods  Skill 7: Prepare, combine and shape pasta  Skill 10: Dough pasta	Differentiation  Puff pastry group  Basic- brought pastry Made pastry sausage rolls.  Medium: Sausage plait nothing added to the sausage meat.  Complex: Made pastry and produced a dish that shows skill	Homework:  Revision	Resources  Trolleys, knifes, Tea towels, dish clothes, oven gloves.  Pasta machines
Lesson 2 Theory Revision		Differentiation	Homework:	Resources
<ul> <li>Objectives:</li> <li>Go through memory techniques to remember the different words for protein, fats and CHO.</li> <li>Students to fill in revision knowledge sheet.</li> <li>Complete a practice question.</li> </ul>			Revision	Blow revision of food science work up to A3

Week 8: Lesson 1: Practical  Objectives:  Learn how to use a pasta machine and make pasta Learn how to make different pasta shapes.  Learn how to fresh cook pasta  Key Words:	Skill 1: General practical skills  Skill 5: Use of equipment pasta machine  Skill 6: Cooking methods  Skill 7: Prepare, combine and shape pasta  Skill 10: Dough pasta	Differentiation  Puff pastry group  Basic- brought pastry Made pastry sausage rolls.  Medium: Sausage plait nothing added to the sausage meat.  Complex: Made pastry and produced a dish that shows skill	Homework:  Revision	Print out revision guide  Resources  Trolleys, knifes, Tea towels, dish clothes, oven gloves.  Pasta machines
Lesson 2 Theory Revision		Differentiation	Homework:	Resources
<ul> <li>Objectives:</li> <li>Go through the layout of the paper</li> <li>Go through how to answer a long answer question</li> <li>Go through how to answer data question.</li> </ul>			Revision	Print out questions.

Veek 10: Lesson 1:	4.2 Assessment	Differentiation:	Homework:	Resources
Book a computer room Objective:	objectives			
To introduce NEA FIT (food investigation task)	4.3.1 Setting the tasks	Writing frame.	To write their	
Go through the structure of task analysis and research.		Sentence stems	task analysis	
Practice the beginning structure of FIT. What the food science top is prior knowledge and what you would research.		Sentence stems	and research up for a given FIT	
ey Words:				
IEA FIT, task, task analysis, research				
esson 2: Practical - Experimental Work	3.3.1.2 Selecting	Differentiation:	Homework:	Resources:
Objective:	appropriate cooking			Trolleys,
Students to work in small groups to complete a class experiment.	methods	Writing frames.		knifes,
	3.5.3 Sensory			Tea towels,
ey Words:	evaluation			dish clothes, oven gloves.
lypothesis, sensory,				
Veek 11: Lesson 1	3.5.3 Sensory	Differentiation:	Homework	Resources:
ook a computer room	evaluation			

Objective:				
<ul> <li>To write up their results for their experiment and conclusion.</li> <li>To plan their own experiment</li> </ul>				
Key Words:				
Lesson 2: Practical	3.3.1.2 Selecting appropriate cooking	Differentiation:	Homework	Resources
Objective:	methods			Trolleys, knifes,
<ul><li>To complete their own practical in small groups.</li><li>To complete their sensory evaluation.</li></ul>	3.5.3 Sensory			Tea towels,
	evaluation			dish clothes, oven gloves.
Week 12:	3.5.3 Sensory	Differentiation	Homework	
Book a computer room	evaluation			
Objective:			.To complete	
<ul> <li>To complete their practical evaluation write up Submission of NEA 1 practise</li> </ul>			in after Easter.	
Lesson 2: Free practical		Differentiation	Homework	Resources