



GCSE MARKING SCHEME

SUMMER 2024

FOOD AND NUTRITION - UNIT 1
3560UA0-1

About this marking scheme

The purpose of this marking scheme is to provide teachers, learners, and other interested parties, with an understanding of the assessment criteria used to assess this specific assessment.

This marking scheme reflects the criteria by which this assessment was marked in a live series and was finalised following detailed discussion at an examiners' conference. A team of qualified examiners were trained specifically in the application of this marking scheme. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners. It may not be possible, or appropriate, to capture every variation that a candidate may present in their responses within this marking scheme. However, during the training conference, examiners were guided in using their professional judgement to credit alternative valid responses as instructed by the document, and through reviewing exemplar responses.

Without the benefit of participation in the examiners' conference, teachers, learners and other users, may have different views on certain matters of detail or interpretation. Therefore, it is strongly recommended that this marking scheme is used alongside other guidance, such as published exemplar materials or Guidance for Teaching. This marking scheme is final and will not be changed, unless in the event that a clear error is identified, as it reflects the criteria used to assess candidate responses during the live series.

WJEC GCSE FOOD AND NUTRITION - UNIT 1

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Guidance for examiners

Positive marking

It should be remembered that learners are writing under examination conditions and credit should be given for what the learner writes, rather than adopting the approach of penalising him/her for any omissions. It should be possible for a very good response to achieve full marks and a very poor one to achieve zero marks. Marks should not be deducted for a less than perfect answer if it satisfies the criteria of the mark scheme.

For questions that are objective or points-based the mark scheme should be applied precisely. Marks should be awarded as indicated and no further subdivision made.

Banded mark schemes

For band marked questions mark schemes are in two parts.

Part 1 is advice on the indicative content that suggests the range of food preparation and nutrition, concepts, facts, issues and arguments which may be included in the learner's answers. These can be used to assess the quality of the learner's response.

Part 2 is an assessment grid advising bands and associated marks that should be given to responses which demonstrate the qualities needed in AO1, AO2 and AO4. Where a response is not creditworthy or not attempted it is indicated on the grid as mark band zero.

Examiners should first read and annotate a learner's answer to pick out the evidence that is being assessed in that question. Once the annotation is complete, the mark scheme can be applied.

This is done as a two stage process.

Stage 1 – Deciding on the band

Beginning at the lowest band, examiners should look at the learner's answer and check whether it matches the descriptor for that band. If the descriptor at the lowest band is satisfied, examiners should move up to the next band and repeat this process for each band until the descriptor matches the answer.

If an answer covers different aspects of different bands within the mark scheme, a 'best fit' approach should be adopted to decide on the band and then the learner's response should be used to decide on the mark within the band. For instance if a response is mainly in band 2 but with a limited amount of band 3 content, the answer would be placed in band 2, but the mark awarded would be close to the top of band 2 as a result of the band 3 content.

Examiners should not seek to mark candidates down as a result of small omissions in minor areas of an answer.

Stage 2 – Deciding on the mark

During standardising (marking conference), detailed advice from the Principal Examiner on the qualities of each mark band will be given. Examiners will then receive examples of answers in each mark band that have been awarded a mark by the Principal Examiner. Examiners should mark the examples and compare their marks with those of the Principal Examiner.

When marking, examiners can use these examples to decide whether a learner's response is of a superior, inferior or comparable standard to the example. Examiners are reminded of the need to revisit the answer as they apply the mark scheme in order to confirm that the band and the mark allocated is appropriate to the response provided.

Indicative content is also provided for banded mark schemes. Indicative content is not exhaustive, and any other valid points must be credited. In order to reach the highest bands of the mark scheme a learner need not cover all of the points mentioned in the indicative content but must meet the requirements of the highest mark band. Where a response is not creditworthy, that is contains nothing of any significance to the mark scheme, or where no response has been provided, no marks should be awarded.

WJEC GCSE FOOD AND NUTRITION - UNIT 1 (NEW)

SUMMER 2024 MARK SCHEME

SECTION A

Question	Answer	Mark	AO1	AO2	AO4	Total
1. (a)	Complete the chart below. Award 1 mark for each correct response. (i) Flour: structure/bulk (ii) Fat / Butter / Margarine : shortening (iii) eggs: setting/coagulation/binding / colour / flavour / taste (iv) Sugar caramelization	3	3			3
1. (b)	Milk is used in a egg custard tart. State two nutrients found in milk. Award 1 mark for each correct response • Protein • Calcium • Carbohydrate • Fat • Vitamin A, D, E, K accept vitamins and minerals – as 1 mark	2	2			2
1. (c)	Describe two ways in which a egg custard tart could be adapted to follow current dietary guidelines. Award 1 mark for an adaptation with little or no description Award 2 marks for adaption with some description, (x 2) • Use Wholemeal flour, add fibre NSP • Use half and half wholemeal and white flour • Use skimmed milk in the filling, less fat • Use semi-skimmed milk , reduces fat content but maintains nutritive value • Half the fat content of pastry , less fat • Use low fat margarine , less fat / butter / butter alternatives • Use unrefined sugars as oppose to refined sugars (use of artificial sweetner, less calories is generally not encouraged – but can accept) • Use less sugar / reduce sugar content • Add fruit, more fibre (NSP), • Use dairy milk alternative: Almond milk, Oat milk has some soluble fibre which reduce cholesterol levels, soy milk less carbohydrates reduce sugar content Credit any other valid response.	4	4			4

Question	Answer	Mark	AO1	AO2	AO4	Total
1. (d)	Give three reasons why eggs are an important food commodity. Award 1 mark for each correct response up to a maximum of 3. Answers could include: • To add vital nutrients to the diet / Good nutritional value - (do not accept good nutrients) • Good source of (HBV) protein • Vitamin B12, B2, D E and Calcium • Low cost / inexpensive / cheap • Variety of methods of cooking • Versatile / used in lots of recipes / used in lots of ways / can be cooked in lots of ways • Easy to get hold of / availability • Easy to store • Many functions in recipes accept a named function e.g. emulsifier, binds ingredients together in a recipe • Good for energy levels • Good satiety – keeps you full • Adds colour, flavour and texture to foods • Household staple ingredient • Contain little fat Credit any other valid response.	3		3		3
	Total for Q1	12	9	3		12

SECTION B

Question	Answer	Mark	AO1	AO2	AO4	Total
2 (a)	Name the equipment shown below. Award 1 mark for correct response. - Food probe - Food thermometer	1	1			1
2. (b)	Explain how and why the equipment shown above is used when cooking food. Answers may refer to - Food probes are used to test the core temperature of food. This is found by placing the probe, at an angle into the thickest part of the high-risk food. - For food to be safe to eat, the probe must read a temperature of at least 75°C. (72 for 2 minutes) 72-75 range - Make sure the tip of the probe is not touching the cooking utensil. - The probe should be cleaned with an antibacterial wipe to prevent cross-contamination throughout the process and after use. - To avoid food poisoning and food still being in danger zone / check foods are cooked properly - Can be used for tempering chocolate	4		4		4
Band	AO2 2 (b)					
3	Award 4 marks for an excellent answer which shows in-depth application of knowledge and understanding of how and why a food probe is used to ensure food is safe to eat. Response is balanced. A temperature must be noted (72 -75 range is acceptable) for internal temperature, or danger zone (5-63)					
2	Award 3 marks for a good response which shows some knowledge and understanding of how and why a food probe is used to ensure food is safe to eat, temperature may be given.					
1	Award 1-2 marks for a basic response that includes limited knowledge and understanding of how and / or why a food probe is used to ensure food is safe to eat. a temperature only may be given.					
0	Award 0 marks not credit worthy or not attempted.					

Question	Answer	Mark	AO1	AO2	AO4	Total
2. (c)	Name three high risk foods. Award 1 mark for each correct response up to a max of 3: • Cooked meat and poultry • Mayonnaise (specific salads, or products milk / unpasturised) • dairy foods, cream, milk, yoghurts • Gravies • Eggs and egg products • Sea food / shellfish/fish (raw) • Cooked rice (and rice products - salad, sushi) • High protein foods • Raw meat and poultry • Meat and meat products (pâtés, stews, pies, pasties, sausages, samosas) Accept named products e.g. Chicken and pork, beef, duck, lamb One meat type 1 poultry type only Accept meat – without clarification Accept any other valid responses.	3	3			3
	Total marks for question 2	8	4	4		8

Question	Answer	Mark	AO1	AO2	AO4	Total
3. (a)	Name the gas that causes bread to rise. Award 1 mark for Carbon dioxide / CO₂	1	1			1
3. (b)	State three methods for incorporating air into food products. Give an example for each. Award 1 mark for each correct method. Award 1 mark for each correct example: Answers may refer to - Whisking; Swiss roll, flan, meringue, trifle sponges, jaffa cakes, cakes, cream / egg whites - Rubbing in; rock cakes, pastry, scones, crumble, shortbread - Sieving; cakes, pastry, icing - Creaming; Victoria sandwich, fairy cakes, - Chemical aeration; raising agent cakes - Folding; flaky pastry, rough puff pastry, Danish pastries, croissants - Beating; batters – Yorkshire puddings, drop scones Credit any other valid response.	6	3	3		6
3. (c)	Name two food products that rely on steam as the raising agent. Answers could include - Choux pastry - Eclairs - Profiteroles - Yorkshire pudding - Toad in the hole - Baked souffles Credit any other acceptable response.	2	2			2

Question	Answer	Mark	AO1	AO2	AO4	Total
3. (d)	Suggest reasons why a batch of scones may fail to rise. Award 1 mark per suggestion Answers could include • Incorrect weighing of ingredients / ratio / amounts of ingredients • Incorrect flour / ingredients • Not enough raising agent / lack of raising agent • Too much / too little liquid • Insufficient rubbing of fat to flour / over rubbing • Not using a hard fat • Over kneading / incorrect consistency of dough • Poor cutting / twisting the cutter so the edge is not neat to allow for expansion • Oven temperature is too low • Oven door opened during baking • Not cooked for long enough / undercooking Credit any other acceptable response.	3		3		3
	Total marks for question 3	12	6	6		12

Question	Answer	Mark	AO1	AO2	AO4	Total
4.(a)	Name three types of food additives. Award 1 mark per point Award up to 3 marks. • Colours • Preservatives • Antioxidants • Emulsifies / stabilisers • Flavourings • Artificial sweeteners • Gelling agents / thickening • Anti caking agents • Natural • Artificial • Synthetic These have to be specific not examples e.g. Salt / pepper – 0 marks	3	3			3
4.(b)	Evaluate the use of additives with reference to the manufacturer and the consumer. to improve: • Colour • Flavour • Texture • Appearance of food • Nutritional value • Preserve food Answers could include: <u>Manufactures</u> Positive • Longer shelf life • Makes products available all year • Improved sales / profits as can improve colour (often lost in food processing) appearance / texture / taste • Fortification – also encourages sales / profit • Makes products more enjoyable for the consumer • Extend range of products Negative • Could reduce sales in products for young children / customers wanting additive free	6			6	6

Question	Answer	Mark	AO1	AO2	AO4	Total
	<u>Consumer</u> Positive • consumers demand plentiful supply of safe food at a reasonable price all year round, hence food producers often need to use additives. • Fortification of essential vitamins • Improved taste and aesthetics • Artificial sweeteners can reduce calorific value • Some sweeteners make products suitable for diabetics Negative • possible allergies • Undesirable additional chemicals added to food • Consumers have a negative outlook on additives due to links to hyperactivity in children and asthma (although no medical link anymore – due to banning of specific ones.) Credit any other valid response.					
	Total marks for question 4	9	3	2	7	9

Band	AO4
4	Award 6 marks for an excellent response that shows sound knowledge and understanding and clear evaluation of the use of additives with reference to the manufacturer and the consumer. The response is balanced and shows sound use of specialist terminology.
3	Award 4-5 marks for a very good response that shows very good knowledge and understanding and evaluation of the use of additives with reference to the manufacturer and the consumer. The responses is fairly well balanced and shows good use of specialist terminology.
2	Award 2-3 marks for a good response. that shows knowledge and understanding and some evaluation of the use of additives with reference to the manufacturer and the consumer. The responses is mostly balanced and shows some use of specialist terminology.
1	Award 1 mark. for a basic response. that shows limited knowledge and understanding of the use of additives with reference to either the manufacturer and the consumer.
0	Award 0 marks not credit worthy or not attempted.

Question	Answer	Mark	AO1	AO2	AO4	Total
5.	Analyse the information shown above and discuss the changes Rhys should make to his diet and lifestyle to meet government guidelines. Award up to 9 marks Answers may refer to: • Eat well guide • Governments 8 steps to healthy eating • Low fat, salt, sugar high fibre • Rhys does not eat 5 a day • Rhys does not drink enough water • too much caffeine in coffee and energy drinks • Lack of dietary fibre / NSP • Too much caffeine in diet could be a cause of his poor sleeping habits • High amounts of sugar putting him at risk of diet related diseases such as diabetes • Lacking in omega 3 • High amounts of sugar putting him at risk of diet related diseases such as diabetes • Construction worker – needs high energy Breakfast: • Decaffeinated coffee, reduce sugar, use sweeteners. Drink fresh fruit juice / smoothie. • Replace high fat Danish pastry to a breakfast cereal, wholegrain toast / granola. Snack: include fresh fruit, high protein bars Lunch • Replace fries with oven baked, plant based burger, wrap, • Remove chocolate bar and replace with nuts, seeds, fresh fruit. • Have a homemade burger Dinner • Homemade fake away such as a fresh pizza, with inclusion of vegetables with glass of water. • Remove large fizzy drink. • Choose healthier take away options Should have 2 litres of water per day Lifestyle • Have more sleep • Play badminton more often instead of gaming • Join a sports club / gym / do different exercise • Walk / jog to work Credit any other valid response.	9		4	5	9
	Total mark for question 5	9		4	5	9

Band	AO2 Maximum 4 marks	AO4 Maximum 5 marks
3	Award 4 marks for an excellent response showing application of nutritional knowledge of Rhys diet.	Award 4-5 marks for an excellent analysis and evaluation of the nutritional benefit of following dietary guidelines. Examples included to quantify response. Refers to diet and lifestyle.
2	Award 2-3 marks for a good response showing application of nutritional knowledge of nutritional knowledge of Rhys diet.	Award 2–3 marks for a good response which shows an analysis and evaluation of following dietary guidelines examples included to quantify response. May focus more on one aspect.
1	Award 1 mark for a basic response that includes little understanding of nutritional knowledge of Rhys diet.	Award 1 mark for a basic response limited some analysis and evaluation.
0	Award 0 marks not credit worthy or not attempted.	Award 0 marks not credit worthy or not attempted.

Question	Answer	Mark	AO1	AO2	AO4	Total
6. (a)	State two functions of Carbohydrates in the diet. Award 1 mark per response • Provide a source of energy. (short and or long term) • Provide dietary fibre. (NSP) • Gut health • Satiety – fills you up / keeps you full for longer	2	2			2
(b)	Name two health conditions that may be caused by a lack of dietary fibre (NSP). Award 1 mark per response • Constipation • Diverticulitis • Haemorrhoids • Higher Cholesterol • Higher risk of (type 2) diabetes • Bowel cancer / bowel disease / problems with intestines / cancer of intestines	2	2			2
(c) (i)	Outline what is meant by the terms intrinsic and extrinsic (free) sugars Answers may refer to • Intrinsic sugars are naturally occurring sugars, such as those found in plants • Extrinsic sugars are sugars that are added to foods e.g. cakes, sweets adding no nutritional value. • Intrinsic sugar – natural such as fructose • Extrinsic sugar – icing on a cake • Intrinsic sugars we cannot see and they are inside the food • Extrinsic used more in processed food / added in production Award 1 mark for a basic outline of what is meant by the terms intrinsic and / or extrinsic (free) sugars. Award 2 marks for a good outline what is meant by the terms intrinsic and extrinsic (free) sugars may give an example.	2		2		2

Question	Answer	Mark	AO1	AO2	AO4	Total
(ii)	Discuss why some individuals may be advised to reduce the amount of sugar in their diet. Answers may refer to: • Diet may not be balanced • Energy in doesn't equal energy out • They diet may be outside of eatwell guide recommendations • Too much sugar can be referred to as empty calories because apart from providing energy they offer no other value. • There is on-going concern that the amount of sugar consumed in UK can lead to serious health issues such as ○ obesity, ○ (type 2) diabetes, ○ heart disease, ○ high blood pressure, ○ some cancers, ○ stroke, ○ tooth decay. Credit any other valid response.	4		4		4
Band	AO2					
3	Award 4 marks for an excellent answer which shows in-depth application of knowledge and understanding of why some individuals may be advised to reduce the amount of sugar in their diet. excellent terminology has been included in the response.					
2	Award 2 – 3 marks for a good response which shows some knowledge and understanding of why some individuals may be advised to reduce the amount of sugar in their diet. some use of accurate terminology.					
1	Award 1 marks for a basic response which shows limited knowledge and understanding of why some individuals may be advised to reduce the amount of sugar in their diet.					
0	Award 0 marks not credit worthy or not attempted.					
	Total marks for question 6	10	4	6		10

Question	Answer	Mark	AO1	AO2	AO4	Total
7 (a)	Name two products that can be made from soya beans. Award 1 mark per suggestion • Tofu • (Soy) milk • (Soy) nuts • Miso • Tempeh • (Soy) sauce • TVP • (Soya) mince / veggie-mince • Soya Cheese • Soya spread • Soya yoghurt • Soya bean oil • Soya bean chocolate • Soya bean ice cream Credit any other valid response.	2	2			2
7 (b)	Suggest two ingredients you could add to soya to enhance its flavour. Award 1 mark per suggestion • Herbs and / or spices accept named for 1 mark each e.g. paprika, curry powder / chilli powder • Garlic • Cheese • Any Named vegetables e.g. Onion peppers • Chili sauce / soy sauce – sweet or savoury is acceptable • Fruit – e.g. banana • Nuts e.g. Hazlenuts, nut spreads e.g. Vegan nutella Do not accept salt and pepper as they are seasoning not ingredients, Credit any other valid response.	2	2			2

Question	Answer	Mark	AO1	AO2	AO4	Total
7 (c)	Plant based products have grown in popularity in recent years. Discuss why eating plant-based foods is now a popular option Answer may refer to Improved nutritional value • Good sources of fibre, vitamins A, C and E • Generally Low in saturated fat • Contain good sources of fat • Contain antioxidants • Help to increase 5 a day • Can Boost immune system • Help to source vital micronutrients • Good source of protein • Healthier option for your body • Religious reasons • Recommended by a doctor / medical reasons e.g. links to irritable bowel Improved long term benefits • Maintains weight / reduce weight • May help to reduce blood pressure • May help to prevent type 2 diabetes • Can make mealtimes less stressful as there is a greater variety of foods to include in meals • Risk of Food safety / food poisoning reduced • Individuals want to try something new • Individuals are trying to eat 5 a day and follow government guidelines • Quick and easy, faster to cook Moral / social economic reasons • More people are becoming vegans / vegetarians • Moral reasons / animal welfare • Some can be lower in cost compared to animal proteins • Better for environment / impact on planet • More accessible now than years prior • Media coverage - promoted on internet, food cookery programmes, magazines etc. Credit any other valid response.	6		4	2	6
	Total marks for question 7	10	4	4	2	10

Band	AO2	AO4
3	Award 4 marks An excellent discussion that provides sound detailed reasons why eating plant-based foods is a popular option. Response also provides clear understanding of dietary needs.	
2	Award 2-3 marks A fairly good / good discussion that provides reasons why eating plant-based foods is a popular option. Response also provides some understanding of dietary needs.	Award 2 marks A well balanced, excellent response analyzing the plant-based diet and includes detailed reasons. Response demonstrates good analysis related to most points technical terms are used with ease and accuracy.
1	Award 1 mark A basic attempt to discuss the reasons why eating plant-based foods is a popular option.	Award 1 mark Some analysis of a plant-based diet. Limited use of technical terms
0	Award 0 marks Not credit worthy or not attempted.	Award 0 marks Not credit worthy or not attempted.

Question	Answer	Mark	AO1	AO2	AO4	Total
8.	Over recent years the cost of living has increased which has impacted on food choice. Assess ways in which consumers can reduce their costs when shopping for food and cooking meals. Award up to 10 marks. Indicative content: Shopping • Bulk buy / cook / freeze • Buy fruit and vegetables in season • Buy wonky fruit and vegetables • Buy from food waste Apps • Buy reduced veg boxes in supermarkets where available • Grow your own • Choose less perishable items • Buy foods when on special offer / use clubcards, vouchers for money off / discount codes • Buy tofu / plant-based products instead of meat • Plan meals for the week • Shop at cheaper supermarkets • Reduced food sections of shops and supermarkets • Cook from scratch • Own brand e.g. Aldi baked beans • Make a shopping list / take a list with you to the shops • No take aways • Use reusable shopping bags – saves buying more every time • Do self scanning then if the bill is more than you have or have budget for – you can remove shopping Cooking • Use the oven wisely and cook several dishes in the oven at the same time to ensure all heat and space is being used. Think about recipes so that not all parts of the cooker is being used. • Use lids on saucepans to reduce heat loss, use the correct size pan and adjust heat under the saucepan to maintain simmering, do not have heat larger than the saucepan. • Do not over fill the saucepan with too much water • Use slow cooker / one pot cooking, microwaves, steamers	10		3	7	10

Question	Answer	Mark	AO1	AO2	AO4	Total
	• Quick methods of cooking e.g a stir fry • Plan meals wisely , planning for each day of the week • Eat as a family and not individually to save cooking / reheating, not keeping food warm – hot holding • Heat water in a kettle rather than stove • Turn off heat a couple of minutes before food is fully cooked especially if it is an electric hob • Do not open oven door repeatedly • Dont keep fridge door open for long periods of time • Use different energy efficient appliances eg. Air fryers • Don't pre-heat oven – too early • Choose recipes with less expensive ingredients • Bulk up recipes , half soya mince , half meat, use lentils • Credit any other valid response.					
	Total marks for question 8	10		3	7	10

Band	AO2 Maximum 3 marks	AO4 Maximum 7 marks
4		Award 7 marks A very well-balanced excellent answer assessing and evaluating ways in which consumers can reduce their costs when shopping for food and cooking meals. Response demonstrates excellent analysis and evaluation related to most points (5+) within the indicative content. Technical terms are used with high degree of accuracy.
3	Award 3 marks A well-balanced excellent answer showing thorough knowledge of ways in which consumers can reduce their costs when shopping for food and cooking meals. Response demonstrates very good application of knowledge related to some points (3-4) included in the indicative content. Technical terms are used with some accuracy.	Award 5-6 marks A mostly balanced answer assessing and evaluating ways in which consumers can reduce their costs when shopping for food and cooking meals. Response demonstrates good analysis and evaluation related to some points (3-4) within the indicative content. Technical terms are used with a degree ease and accuracy.
2	Award 2 marks A fairly well-balanced answer showing good knowledge and clear understanding of ways in which consumers can reduce their costs when shopping for food and cooking meals. Response demonstrates mostly good application of knowledge related to some points (2-3) included in the indicative content. Technical terms are used with some accuracy.	Award 3-4 marks A fairly well-balanced answer assessing and evaluating ways in which consumers can reduce their costs when shopping for food and cooking meals. Response demonstrates some analysis and evaluation related to a few points (2-3) within the indicative content. Some Technical terms are used with ease and accuracy.
1	Award 1 mark A basic response showing limited knowledge and understanding of ways in which consumers can reduce their costs when shopping for food and cooking meals. Limited use of technical terms.	Award 1-2 marks A limited analysis and evaluation of knowledge with reference to ways in which consumers can reduce their costs when shopping for food and cooking meals. Limited use of technical terms.
0	Award 0 marks Not credit worthy or not attempted.	Award 0 marks Not credit worthy or not attempted.

Question		Mark	AO1	AO2	AO4	Total
1.	(a)	3	3			12
	(b)	2	2			
	(c)	4	4			
	(d)	3		3		
2.	(a)	1	1			8
	(b)	4		4		
	(c)	3	3			
3.	(a)	1	1			12
	(b)	6	3	3		
	(c)	2	2			
	(d)	3		3		
4.	(a)	3	3		6	9
	(b)	6				
5.		9		4	5	9
6.	(a)	2	2			10
	(b)	2	2			
	(c)	(i)	2	2		
		(ii)	4	4		
7.	(a)	2				10
	(b)	2	2			
	(c)	6	2	4	2	
8.		10		3	7	10
Total		80	30	30	20	80
% AO			15%	15%	10%	40%