



GCSE FOOD PREPARATION AND NUTRITION 8585/W

Paper 1 Food Preparation and Nutrition

Mark scheme

June 2020

Version: 1.0 Final

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this mark scheme are available from aqa.org.uk

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Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly Level 3 with a small amount of Level 4 material it would be placed in Level 3 but be awarded a mark near the top of the level because of the Level 4 content.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. There will be an answer in the standardising materials which will correspond with each level of the mark scheme. This answer will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the example to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the Indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

Section A			
Question	Answer Key	Assessment Objective	Total marks
01.1	C – Food must be eaten by this date.	AO1	1
01.2	D – Warmth	AO1	1
01.3	D – 75°C	AO1	1
01.4	B – ascorbic acid.	AO1	1
01.5	C – maintain bones and teeth.	AO1	1
01.6	D – Smoked bacon	AO1	1
01.7	C – 35%	AO1	1
01.8	B – Coagulation	AO1	1
01.9	C – oxidation.	AO1	1
01.10	C – A and D	AO1	1
01.11	D – 132°C	AO1	1
01.12	B – develop texture.	AO1	1
01.13	C – three fatty acids.	AO1	1
01.14	D – Lactose	AO1	1
01.15	D – shortening.	AO1	1
01.16	C – Nuts	AO1	1
01.17	C – Intensive	AO1	1

01.18	A – Bread	AO1	1
01.19	D – Pork	AO1	1
01.20	A – detect differences between foods.	AO1	1

Section B			
Qu	Part	Marking guidance	Total marks
02	1	<p>Give three different rules for storing food safely in a fridge.</p> <p>Marking guidance</p> <p>This question is assessed against AO1(a).</p> <p>Award 1 mark for each different response given from the list below</p> <ul style="list-style-type: none"> • Cool food prior to chilling – don't put hot food in the fridge. • Monitor fridge temperatures using a thermometer, check the visual display (0 to below 5°C). Temperature of the fridge should not be in the danger zone 5 to 63°C • Cover food. • Open fridge door for as short a time as possible. • Keep raw and cooked food separate. • Raw meat should be covered and kept below cooked meat. • Raw meat should be in sealed containers. • Food stored in the fridge should have spaces between items / Do not overstock the fridge. • Salad and vegetables should have soil removed (washed) before putting in the fridge. • Salads and vegetables stored in lidded boxes/salad drawer. • Clean and inspect your fridge regularly to ensure it remains hygienic and in good working order. • Follow date marks on food, so first in, last out – stock rotation. <p>Note for examiners –Fridge temperature – accept 0°C to 5°C</p> <p>Any other valid responses should be credited.</p>	3

02	2	<p>Give two different food safety rules when preparing raw chicken.</p> <p>Marking guidance</p> <p>This question is assessed against AO1(a).</p> <p>Award 1 mark for each different response given from the list below</p> <p>Preparing</p> <ul style="list-style-type: none"> • Chicken should not be left in the danger zone 5 to 63°C before preparation. • Check the date mark of the chicken. • Check the chicken is thoroughly defrosted. • Do not wash raw chicken. • Use clean equipment. • Clean all work surfaces/chopping boards before and after preparing raw chicken. • Use colour coding eg utensils/chopping board, to prevent the spread of bacteria from raw to cooked food eg red chopping board for raw chicken and yellow chopping board for cooked chicken. • Regular hand washing when handling chicken during preparation. • Wear gloves when handling chicken during preparation. 	2
02	3	<p>Give two different food safety rules when cooking raw chicken.</p> <p>Marking guidance</p> <p>This question is assessed against AO1(a).</p> <p>Award 1 mark for each different response given from the list below</p> <p>Cooking</p> <ul style="list-style-type: none"> • When cooking chicken, use separate utensils when handling raw and cooked chicken, to prevent cross contamination. • Use clean cooking utensils and cooking equipment. • Separate raw and cooked food, to prevent cross contamination. • Chicken should be cooked right through to the middle/core to ensure the bacteria are destroyed and the chicken is safe to eat. • To ensure chicken is properly cooked, it should reach an internal temperature of at least 75°C • Use a temperature probe to ensure the core temperature of the chicken is at least 75°C • Juices should run clear. <p>Note for examiners - Do not allow 'high oven temperature' or 'hot oven.'</p> <p>Any other valid responses should be credited.</p>	2

02	4	<p>Define the term cross-contamination.</p> <p>Marking guidance</p> <p>This question is assessed against AO2.</p> <p>Transfer of bacteria (1) from food, work surfaces and equipment, people, pests, waste food and rubbish onto 'clean/cooked/ready to eat' food (1).</p> <p>e.g. transfer of bacteria from raw to cooked food.</p> <p>Accept references to chicken when describing cross contamination</p>	2
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02	5	<p>When making vegetable soup</p> <ul style="list-style-type: none"> • give two different examples of how cross-contamination could take place • describe how this could be prevented. <p>Marking guidance</p> <p>This question is assessed against AO2.</p> <p>Indicative content</p> <p>1 mark for each valid point given, either from the list below or other relevant responses worthy of credit.</p> <p>Two different examples must be stated.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;">Example</th> <th style="text-align: left; padding: 5px;">Prevention</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">People eg unclean hands/hair in food</td> <td style="padding: 5px;"> <ul style="list-style-type: none"> • Personal hygiene of food handler eg avoid transference of hair, sweat, saliva etc onto the vegetables. Wear a clean apron, cover hair with a net/hat etc. • Clothing: should be clean. • Regularly wash hands. • People with coughs and colds should not work in food areas until well again. • Don't double dip when tasting the soup. Always use a clean spoon. </td> </tr> <tr> <td style="padding: 5px;">Dirt/mud/soil/chemicals on vegetables</td> <td style="padding: 5px;"> <ul style="list-style-type: none"> • Thoroughly wash all vegetables before preparing the vegetables to remove soil / other contaminants. </td> </tr> <tr> <td style="padding: 5px;">Pests eg flies/insects</td> <td style="padding: 5px;"> <ul style="list-style-type: none"> • Keep food preparation area clean and tidy. • Keep food covered/lids on saucepans. </td> </tr> </tbody> </table>	Example	Prevention	People eg unclean hands/hair in food	<ul style="list-style-type: none"> • Personal hygiene of food handler eg avoid transference of hair, sweat, saliva etc onto the vegetables. Wear a clean apron, cover hair with a net/hat etc. • Clothing: should be clean. • Regularly wash hands. • People with coughs and colds should not work in food areas until well again. • Don't double dip when tasting the soup. Always use a clean spoon. 	Dirt/mud/soil/chemicals on vegetables	<ul style="list-style-type: none"> • Thoroughly wash all vegetables before preparing the vegetables to remove soil / other contaminants. 	Pests eg flies/insects	<ul style="list-style-type: none"> • Keep food preparation area clean and tidy. • Keep food covered/lids on saucepans. 	4
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		<ul style="list-style-type: none"> • Ultra violet light fly catchers to kill insects. 	
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		<ul style="list-style-type: none"> • Prevent access, keep windows and doors closed. 	
	Equipment eg chopping boards/knives	<ul style="list-style-type: none"> • Ensure all equipment used for vegetable preparation is clean. • Clean work surfaces before and after use with hot soapy water or an antibacterial spray. • Use of colour coded equipment such as chopping boards and knives (a brown chopping board may be used for vegetables). 	
	Work surfaces	<ul style="list-style-type: none"> • Clean as you go to prevent cross contamination. • Use anti-bacterial sprays to clean work surfaces. 	
	Cloths	<ul style="list-style-type: none"> • Use disposable cloths when cleaning. • Use clean cloths, washed daily above 60°C. 	
	Rubbish	<ul style="list-style-type: none"> • Dispose of dirty peelings. • Don't touch the bin/use a foot pedal bin. • Empty bin regularly and 'bins should have a lid.' 	
	Other contaminated food	<ul style="list-style-type: none"> • Keep raw and cooked foods separate. 	
<p>Any other valid responses should be credited.</p>			

03	1	<p>Explain with examples, the differences between high and low biological value proteins.</p> <p>Marking guidance</p> <p>This question is assessed against AO1(b).</p> <p>Level of response question</p> <table border="1"> <tr> <td>Responses show thorough knowledge and understanding of differences between high and low biological value proteins. Detailed and factual explanations, with examples of both high and low, are given which use the correct terminology.</td> <td>5 – 6 marks</td> </tr> </table>	Responses show thorough knowledge and understanding of differences between high and low biological value proteins. Detailed and factual explanations, with examples of both high and low, are given which use the correct terminology.	5 – 6 marks	6
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		<p>Responses show good knowledge and understanding of differences between high and low biological value proteins. Factual explanations are given with example(s) some of which use the correct terminology.</p>	<p>3 – 4 marks</p>	
		<p>Responses show basic knowledge and understanding of a difference between high and low biological value proteins. Limited explanations are given which attempt to use related terminology. There may be no examples.</p>	<p>1 – 2 marks</p>	
<p>No answer worthy of credit.</p>	<p>0 marks</p>			
<p>Indicative content</p> <ul style="list-style-type: none"> • Foods that contain all of the essential amino acids are described as high biological value (HBV). These are mainly animal proteins, for example meat, fish, eggs, milk, cheese but also include soya beans and quinoa. • Foods that lack one or more of the essential amino acids are described as low biological value (LBV), for example, pulses, peas, beans, lentils, cereals such as wheat, rice, oats, barley, rye and millet, nuts, seeds and gelatine. • By eating a mixture of LBV protein foods together, you can get all the essential amino acids the body needs, and this is known as protein complementation, for example; beans on toast, hummus and pitta bread, lentil soup and bread, rice and peas. <p>Other valid responses should be credited.</p>				

<p>03</p>	<p>2</p>	<p>Explain how the following cooking methods prevent the loss of vitamins in vegetables.</p> <p>Marking guidance</p> <p>This question is assessed against AO2.</p> <p>Steaming</p> <ul style="list-style-type: none"> • No contact with water so water soluble vitamins will not leach out. • Steam is very hot so food cooks quickly, which reduces water soluble vitamin loss. • Loss of water-soluble vitamins (B group and C) is reduced because the food does not come in direct contact with water. • Credit should be given for naming specific vegetables that are suitable for steaming eg asparagus, broccoli, green vegetables. • Credit should be given for steaming from chilled/frozen in bags/containers if related to loss of vitamins. <p>Stir frying</p> <ul style="list-style-type: none"> • A quick method of cooking so the water-soluble vitamins are retained. • Fat/oil is used to cook which ‘seals in’ the vitamins. • No water is used which prevents the water-soluble vitamins B group and C from dissolving in the water. • Any vitamins and minerals which leach into the sauce/juices are retained. <p>Other valid responses should be credited.</p>	<p>4</p>
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03	3	<p>Cheese is made from milk. Complete the table to explain what happens at the following stages of cheesemaking.</p> <p>Marking guidance</p> <p>This question is assessed against AO2.</p> <p>Award one mark for each different response given from the list below.</p> <p>These are examples of suitable responses and any other relevant responses should be credited.</p> <p>To gain maximum marks, all boxes must be completed with creditworthy responses.</p>	6
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Production stage	Explain the process
Milk is pasteurised	<ul style="list-style-type: none"> • Milk is heated to 72°C for 15 seconds. • Pasteurisation destroys most bacteria. • Pathogenic bacteria are destroyed. • Most bacteria need to be destroyed so only selected bacteria in the starter culture are added.
Starter culture is added	<ul style="list-style-type: none"> • The starter culture or lemon juice is added to make the mixture acidic. • The bacteria in the starter culture change the milk sugar into acid.
Formation of curds and whey	<ul style="list-style-type: none"> • Rennet/acid/bacteria all help to turn the milk into a semi-liquid called curds and whey. Curds are solid/whey is liquid. • The rennet/acid cause the milk proteins to coagulate (set). The liquid milk becomes a semi-liquid. • Once set, the curd is stirred and cut. • The curd is pressed into cheese and the whey is drained off.
Ripening and maturing of the cheese	<ul style="list-style-type: none"> • The cheese is chilled until the desired age is reached. • The cheese is left for weeks/months for the flavour to develop. • Milder cheeses are stored for a shorter time. • The stronger, mature cheeses are stored for longer. • The storage time is dependent on the type of cheese being made. • Mould can be added at this stage to introduce another flavour. • Salt is added for flavour. • Salt preserves the cheese. • The bacteria help to ripen the cheese. • Cheese is chilled to control the growth of moulds and bacteria. • The humidity and temperature are carefully controlled.

03	4	<p>With reference to the ingredients and nutrition label</p> <ul style="list-style-type: none"> • assess the suitability of this meal for an adult • evaluate how regularly eating meals with similar nutritional values can negatively affect the health of adults. <p>Marking guidance</p> <p>This question is assessed against AO4.</p> <table border="1" data-bbox="440 591 1321 1980"> <tr> <td data-bbox="440 591 1179 1122"> <p>Responses will include thorough and detailed factual explanations of how excess energy/fat/salt can affect health. Qualified and justified reasons are given related to the analysis. Response will include specific reference to a healthy balanced diet. There will be a very good balance between analysis and evaluation.</p> <p>Analysis of the meal is very good and thorough and refers to a wide range of points relating to the nutritional label and ingredients referred to in the indicative content.</p> <p>Evaluation includes very good and accurate conclusions which highlight the effects on health. Draws detailed and justified conclusions which are linked to the analysis.</p> </td> <td data-bbox="1179 591 1321 1122">7 – 9 marks</td> </tr> <tr> <td data-bbox="440 1122 1179 1585"> <p>Responses will include some factual explanations linked to how excess energy/fat/salt can affect health. Some reasons are given related to the analysis. Responses may include more general reference to a healthy balanced diet. Response is good but may be stronger in either analysis or evaluation.</p> <p>Analysis of the meal is good and refers to a range of points relating to the-nutritional label and ingredients referred to in the indicative content.</p> <p>Evaluation includes good conclusions which highlight the effects on health. Draws some justified conclusions which are linked to the analysis</p> </td> <td data-bbox="1179 1122 1321 1585">4 – 6 marks</td> </tr> <tr> <td data-bbox="440 1585 1179 1980"> <p>Responses will include limited factual explanations linked to how excess energy/fat/salt can affect health. Limited reasons are given related to the analysis. Responses may include some limited reference to a healthy balanced diet. There may be an imbalance between analysis and evaluation where one aspect may be omitted or stronger.</p> <p>Analysis of the meal is basic and refers to limited points relating to the nutritional label and ingredients referred to in the indicative content.</p> </td> <td data-bbox="1179 1585 1321 1980">1 – 3 marks</td> </tr> </table>	<p>Responses will include thorough and detailed factual explanations of how excess energy/fat/salt can affect health. Qualified and justified reasons are given related to the analysis. Response will include specific reference to a healthy balanced diet. There will be a very good balance between analysis and evaluation.</p> <p>Analysis of the meal is very good and thorough and refers to a wide range of points relating to the nutritional label and ingredients referred to in the indicative content.</p> <p>Evaluation includes very good and accurate conclusions which highlight the effects on health. Draws detailed and justified conclusions which are linked to the analysis.</p>	7 – 9 marks	<p>Responses will include some factual explanations linked to how excess energy/fat/salt can affect health. Some reasons are given related to the analysis. Responses may include more general reference to a healthy balanced diet. Response is good but may be stronger in either analysis or evaluation.</p> <p>Analysis of the meal is good and refers to a range of points relating to the-nutritional label and ingredients referred to in the indicative content.</p> <p>Evaluation includes good conclusions which highlight the effects on health. Draws some justified conclusions which are linked to the analysis</p>	4 – 6 marks	<p>Responses will include limited factual explanations linked to how excess energy/fat/salt can affect health. Limited reasons are given related to the analysis. Responses may include some limited reference to a healthy balanced diet. There may be an imbalance between analysis and evaluation where one aspect may be omitted or stronger.</p> <p>Analysis of the meal is basic and refers to limited points relating to the nutritional label and ingredients referred to in the indicative content.</p>	1 – 3 marks	9
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		<p>Indicative content</p> <p>Analysis is a breakdown of the fat, salt, sugar and energy in the meal compared to Recommended Intakes for an adult. Evaluation is the impact on health of an unbalanced diet – ie eating too much fat, salt, sugar and energy.</p> <p><u>Analysis</u></p> <table border="1"> <tr> <td data-bbox="438 801 683 2029"> <p>Fat</p> </td> <td data-bbox="683 801 1321 2029"> <p>Analysis</p> <ul style="list-style-type: none"> • The meal is very high in fat, particularly saturated fat (120%). • Ingredients which are high in fat are: Lasagne: Minced beef, whole milk, cheese, double cream, bacon, butter, vegetable oil. Garlic bread: Butter. • Unsaturated fats are preferable as these don't raise LDL cholesterol levels – these include monounsaturated and polyunsaturated fats. • We need some fat in our diets to supply the essential fatty acids and to provide the fat-soluble vitamins; A, D, E and K. • Fats help to keep the body warm, as the fat under our skin insulates us. • Fat protects internal organs, for example it protects our kidneys from damage. • In our diets, a maximum of 35% of our total energy should come from fats. <p>Evaluation</p> <ul style="list-style-type: none"> • Too much fat can lead to: <ul style="list-style-type: none"> – obesity, high blood pressure/hypertension/coronary heart disease/strokes and type 2 diabetes – mental health issues associated with obesity may include; body image, depression, embarrassment, mobility, self-esteem, fertility. • Saturated fat increases cholesterol levels which can lead to CHD and high blood pressure/hypertension. </td> </tr> </table>	<p>Fat</p>	<p>Analysis</p> <ul style="list-style-type: none"> • The meal is very high in fat, particularly saturated fat (120%). • Ingredients which are high in fat are: Lasagne: Minced beef, whole milk, cheese, double cream, bacon, butter, vegetable oil. Garlic bread: Butter. • Unsaturated fats are preferable as these don't raise LDL cholesterol levels – these include monounsaturated and polyunsaturated fats. • We need some fat in our diets to supply the essential fatty acids and to provide the fat-soluble vitamins; A, D, E and K. • Fats help to keep the body warm, as the fat under our skin insulates us. • Fat protects internal organs, for example it protects our kidneys from damage. • In our diets, a maximum of 35% of our total energy should come from fats. <p>Evaluation</p> <ul style="list-style-type: none"> • Too much fat can lead to: <ul style="list-style-type: none"> – obesity, high blood pressure/hypertension/coronary heart disease/strokes and type 2 diabetes – mental health issues associated with obesity may include; body image, depression, embarrassment, mobility, self-esteem, fertility. • Saturated fat increases cholesterol levels which can lead to CHD and high blood pressure/hypertension. 			
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		<ul style="list-style-type: none"> Most people in the UK eat too much fat – all fats are high in energy supplying 9kcal per gram of fat, so the highest of the macronutrients.
Salt	<p>Analysis</p> <ul style="list-style-type: none"> The meal contains a large amount of salt. Ingredients which are high in salt are: Lasagne Cheese, butter (if salted), salt, bacon, stock cube Garlic bread White bread, butter (if salted), salt. Some salt is needed to control the concentration of body fluids. <p>Evaluation</p> <ul style="list-style-type: none"> Too much salt can lead to: Cardiovascular disease: High blood pressure, heart disease and strokes. 	
Sugar	<p>Analysis</p> <ul style="list-style-type: none"> This meal is low in sugar; therefore, there should be no negative affects to health related to the sugar content of this meal. The sugar is provided by the natural (fruit sugar and lactose) sugars in these foods: Lasagne Whole milk, chopped tomatoes, cheese, onions, stock cubes (free sugar is sometimes added to these), double cream, tomato purée. Garlic bread White bread. No more than 5% of our energy should come from free sugar (extrinsic sugar/ added sugar). <p>Evaluation</p> <p>There should be no negative affects to health related to the sugar content of this meal.</p>	
Energy	<p>Analysis</p> <ul style="list-style-type: none"> High energy foods in the meal are: Lasagne Minced beef, whole milk, cheese, egg lasagne sheets, double cream, bacon, butter and vegetable oil Garlic bread White bread, butter 	

		<div style="border: 1px solid black; padding: 5px;"> <ul style="list-style-type: none"> • The meal is high in energy. It provides almost half of all the kilocalories (energy) needed by the average adult. • One main meal would normally be expected to provide 1/3 of the total energy needed in one day. <p>Evaluation If over consumption of energy occurs on a regular basis it could lead to obesity and its associated effects on physical/mental health.</p> </div> <p>Other relevant responses should be credited.</p>	
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<p>04</p>	<p>1</p>	<p>Give three functions of starchy carbohydrates in the diet.</p> <p>Marking guidance</p> <p>This question is assessed against AO1(a).</p> <p>Award 1 mark for each different response given from the list below</p> <ul style="list-style-type: none"> • To give the body energy – carbohydrates are the main source of energy in the diet. • For slow release energy – starchy carbohydrates are digested more slowly than sugars. • Exercising muscles need carbohydrates as their main source of fuel. • Starchy foods provide important nutrients to the diet including B vitamins, iron, calcium and folic acid. • Helps us to feel fuller for longer which helps to prevent weight gain. • To provide dietary fibre, which helps the digestive system to work properly. • To prevent constipation. • Helps to control blood sugar levels. • Lower risk of heart disease, stroke, type 2 diabetes and bowel cancer. • Prevents a lack of energy, early fatigue, loss of concentration and delayed recovery. • Starchy carbohydrates stop the use of protein as an energy source, so protein used as its primary function growth and repair. <p>Any other valid responses should be credited.</p>	<p>3</p>
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04	2	<p>Discuss the healthy eating guidelines and their importance when planning meals for young children.</p> <p>Marking guidance</p> <p>This question is assessed against AO2.</p> <table border="1" style="width: 100%;"> <tr> <td>Responses show thorough knowledge and understanding of healthy eating guidelines for young children. Detailed and factual explanations related to planning meals for young children.</td> <td style="text-align: center;">5 – 6 marks</td> </tr> <tr> <td>Responses show good knowledge and understanding of healthy eating guidelines for young children. Factual explanations, some of which relate to planning meals for young children.</td> <td style="text-align: center;">3 – 4 marks</td> </tr> <tr> <td>Responses show basic knowledge and understanding of healthy eating guidelines for young children. Limited explanation related to planning meals for young children.</td> <td style="text-align: center;">1 – 2 marks</td> </tr> <tr> <td>No answer worthy of credit.</td> <td style="text-align: center;">0 marks</td> </tr> </table> <p>Indicative content</p> <p>Healthy eating guidelines</p> <ul style="list-style-type: none"> • Reference to current healthy eating guidelines eg Eatwell guide. The need for plenty of fruit and veg and starchy carbohydrates, as well as protein foods, dairy or dairy substitute foods and a small amount of oils and spreads. • Reference to the 8 tips for eating well. <ul style="list-style-type: none"> – Base your meals on starchy carbohydrates – Eat lots of fruit and veg – Eat more fish – including a portion of oily fish – Cut down on saturated fat and sugar – Eat less salt – Get active and be a healthy weight – Don't get thirsty – Don't skip breakfast <p>Planning meals</p> <ul style="list-style-type: none"> • Ensure the nutritional needs of young children are met to prevent deficiencies. • Ensure all the macro and micro nutrients are provided, especially protein for growth and repair, calcium and vitamin D for strong bones and teeth, iron and vitamin C for healthy red blood cells, dietary fibre to prevent constipation. 	Responses show thorough knowledge and understanding of healthy eating guidelines for young children. Detailed and factual explanations related to planning meals for young children.	5 – 6 marks	Responses show good knowledge and understanding of healthy eating guidelines for young children. Factual explanations, some of which relate to planning meals for young children.	3 – 4 marks	Responses show basic knowledge and understanding of healthy eating guidelines for young children. Limited explanation related to planning meals for young children.	1 – 2 marks	No answer worthy of credit.	0 marks	6
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No answer worthy of credit.	0 marks										

		<ul style="list-style-type: none"> • Correct portion sizes for the PAL of the child and taking into account current body weight to prevent obesity or underweight children. • To include 5 a day fruit/veg to reduce risk of long term illnesses / prevent obesity. • To establish good eating habits for future life and prevent disease and illnesses in later life. • Children should be discouraged from consuming high amounts of sugar – to reduce tooth decay. • To ensure the child has enough energy in their diet to allow growth and maintain a healthy body weight. <p>Other valid responses should be credited.</p>	
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04	3	<p>Analyse the ingredients and method. Why did these faults happen?</p> <p>Explain how you could prevent the faults occurring resulting in a better custard tart.</p> <p>Marking guidance</p> <p>This question is assessed against AO4.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;"> <p>Responses will include comprehensive, detailed explanations of how the ingredients and methods used for the custard tart can affect its quality. Qualified changes with justifications are given related to the analysis. Response will include detailed and specific reference to the scientific and functional properties of ingredients. Excellent understanding of key technical terms are used throughout. There will be a very good balance between analysis and evaluation.</p> <p>All four faults must be addressed.</p> <p>Analysis of the recipe is excellent and thorough and refers to a wide range of points relating to the role of ingredients, ratios and methods in preparing and making the custard tart referred to in the indicative content.</p> <p>Evaluation – excellent judgements and conclusions are drawn which highlight the faults and how to prevent these. Fully justified reasons are given which link to analysis.</p> </td> <td style="text-align: center; vertical-align: middle; padding: 5px;"> <p>9 – 11 marks</p> </td> </tr> </table>	<p>Responses will include comprehensive, detailed explanations of how the ingredients and methods used for the custard tart can affect its quality. Qualified changes with justifications are given related to the analysis. Response will include detailed and specific reference to the scientific and functional properties of ingredients. Excellent understanding of key technical terms are used throughout. There will be a very good balance between analysis and evaluation.</p> <p>All four faults must be addressed.</p> <p>Analysis of the recipe is excellent and thorough and refers to a wide range of points relating to the role of ingredients, ratios and methods in preparing and making the custard tart referred to in the indicative content.</p> <p>Evaluation – excellent judgements and conclusions are drawn which highlight the faults and how to prevent these. Fully justified reasons are given which link to analysis.</p>	<p>9 – 11 marks</p>	11
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		<p>Responses will include mainly accurate, factual explanations of how the ingredients and methods used for the custard tart can affect its quality. Most changes are justified related to the analysis. Response will include specific reference to the scientific and functional properties of ingredients. Technical terms are used. There will be a good balance between analysis and evaluation.</p> <p>Analysis of the recipe is very good and refers to a range of points relating to the role of ingredients, ratios and methods in preparing and making the custard tart referred to in the indicative content.</p> <p>Evaluation – very good judgements and conclusions are drawn which highlight several faults and how to prevent these. Justified reasons are given which link to the analysis.</p>	<p>7 – 8 marks</p>	
		<p>Responses will include some explanations of how the ingredients and methods used for the custard tart can affect its quality. Some changes and justification related to the analysis. Response will include reference to the scientific and functional properties of ingredients. There will be good evidence of both analysis and evaluation</p> <p>Analysis of the recipe is good and refers to some points relating to the role of ingredients, ratios and methods in preparing and making the custard tart referred to in the indicative content.</p> <p>Evaluation – good judgements and conclusions are drawn which highlight some reasons for the faults and how to prevent these. Some justified reasons are given which are linked to the analysis.</p>	<p>5 – 6 marks</p>	
		<p>Responses will include limited explanations of how a few ingredients and methods used for the custard tart can affect its quality. Limited changes and justification related to the analysis. Response will include limited reference to the scientific and functional properties of ingredients. There will be evidence of analysis and/or evaluation.</p> <p>Analysis of the recipe is limited and refers to limited points relating to the role of ingredients, ratios and methods in preparing and making the custard tart referred to in the indicative content.</p> <p>Evaluation – limited judgements which highlight limited reasons for the faults and how to prevent these. Limited justified reasons are given which may be linked to analysis.</p>	<p>3 – 4 marks</p>	

		<p>Responses will include very limited factual explanations linked to the different ingredients or methods. Analysis or evaluation may be omitted.</p> <p>Analysis of the recipe is very limited or omitted relating to the ingredients, ratios and methods in preparing and making the custard tart referred to in the indicative content.</p> <p>Evaluation may draw very limited judgements with little or no reference to the analysis.</p>	<p>1 – 2 marks</p>	
		<p>Nothing worthy of credit.</p>	<p>0 marks</p>	

Fault	Reason	Prevention
The pastry had an undercooked taste	<ul style="list-style-type: none"> • Pastry was not blind baked. • Pastry was too thick. • Pastry not cooked for long enough. • Oven was too cool. 	<ul style="list-style-type: none"> • Bake pastry blind. • Roll pastry to the correct thickness. • Increase temperature for pastry. • Check temperatures and timings. • Use a metal tin to conduct heat better.
There was shrinkage in the pastry	<ul style="list-style-type: none"> • Ingredients eg fat and water were not chilled. • Wrong type of fat used eg low-fat spread. • Pastry was not rested before rolling. • Pastry was stretched when lining the dish. • Oven incorrect temperature. • Incorrect ratio of fat to flour. 	<ul style="list-style-type: none"> • Weigh ingredients carefully. • Use chilled ingredients. • Use correct fat. • Rest pastry/pastry case in the fridge before rolling out to relax the gluten. • Line the dish without stretching. • Check oven is at correct temp.
The pastry was tough	<ul style="list-style-type: none"> • Wrong flour used. • Wrong fat used. • Fat was not chilled. • Incorrect ratio of fat to flour. • Rubbing in of the fat was carried out incorrectly. • Incorrect ratio of water added. • Pastry was kneaded for too long. • Pastry was overhandled. 	<ul style="list-style-type: none"> • Use plain flour – strong plain flour includes too much protein/gluten. • Use a white fat, eg lard, Trex to make the pastry shorter, crumblier. • Ensure fat is at correct temperature to maximise the plasticity of the fats and shortening of the pastry. • Weigh fat and flour on digital scales. • Rub fat in gently using the finger tips, lift hands up high to allow flour/fat to aerate when falling in the bowl. • Time the rubbing in, if using a food processor and this was left on for too long, the pastry will be over processed, allowing the gluten to develop. • Add water gradually, a little at a time. • Do not knead pastry as this develops the gluten. • Aim to roll out the pastry just once, as overhandling will toughen the pastry.

<p>The filling was lumpy and did not set</p>	<ul style="list-style-type: none"> • Insufficient egg was used. • There was too much milk. • Incorrect ratio of milk to egg. • The milk was too hot and set (coagulated) the egg yolk which caused lumps of egg. • The milk was not whisked in. • Insufficient cooking time. • Oven too cool. 	<ul style="list-style-type: none"> • Either increase the number of eggs or decrease the amount of milk used to allow coagulation to occur. • The custard did not set (coagulate) due to incorrect ratios of egg/milk. • Warm the milk, do not boil to avoid setting the egg. (Over coagulated). • Whisk the warm milk into the egg gradually to avoid overheating the egg and causing coagulation, lumps of egg. • The tart was not left in the oven for long enough. • The oven temperature was too low to allow the coagulation of the egg.
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Other valid responses should be credited.

<p>05</p>	<p>Heat is transferred to food in different ways.</p> <p>Complete the table below.</p> <ul style="list-style-type: none"> • Explain how heat is transferred to food • Give an example of a cooking method. Do not repeat your answers. <p>Marking guidance</p> <p>This question is assessed against AO2.</p> <p>Award 1 mark for each valid point, either from the list below or other relevant responses worthy of credit.</p>	<p>6</p>
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Method of heat transfer	Explain how heat is transferred to food	Example of a cooking method
<p>Conduction</p>	<p>Heat travels through solids from one molecule to the next by contact.</p> <p>The atoms vibrate and transfer heat energy.</p> <p>Metals are good conductors of heat eg baking trays and saucepans as they are denser and heat is transferred more quickly.</p>	<p>Relevant cooking methods:</p> <ul style="list-style-type: none"> • Baking • Boiling • Contact grill (do not accept grilling) • Dry frying • Poaching • Roasting • Shallow fry • Simmering • Stir fry.

<p>Convection</p>	<p>Heat travels through water (liquids) and air</p> <p>The more heat energy the faster the convection currents move.</p> <p>A convection current is the movement of heat in water or in air.</p> <p>Convection currents happen because hot air/water rises and cool air/water falls.</p>	<p>Relevant cooking methods:</p> <p>In air:</p> <ul style="list-style-type: none"> • Baking • Roasting. <p>in a liquid:</p> <ul style="list-style-type: none"> • Blanching • Braising • Boiling • Deep frying • Poaching • Simmering • Steaming • Stewing.
<p>Radiation</p>	<p>Heat travels directly onto food in straight lines eg grilling.</p> <p>Infrared heat rays heat the surface of the food and are absorbed.</p> <p>In a microwave oven electromagnetic waves vibrate water molecules in food producing heat energy.</p>	<p>Relevant cooking methods:</p> <ul style="list-style-type: none"> • BBQ • Grilling • Microwaving • Toasting.

06	1	<p>Explain the advantages of buying locally produced and seasonal ingredients.</p> <p>Marking guidance</p> <p>This question is assessed against AO2.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Responses show thorough knowledge and understanding of buying locally produced and seasonal ingredients. Detailed and factual descriptions are given which relate to buying locally and clearly describe locally produced/seasonal ingredients.</td> <td style="text-align: center; padding: 5px;">5 – 6 marks</td> </tr> <tr> <td style="padding: 5px;">Responses show good knowledge and understanding of buying locally produced and seasonal ingredients. Factual descriptions are given, some of which describe locally produced / seasonal ingredients.</td> <td style="text-align: center; padding: 5px;">3 – 4 marks</td> </tr> <tr> <td style="padding: 5px;">Responses show basic knowledge and understanding of buying locally produced and seasonal ingredients. Limited descriptions are given which attempt to describe locally produced/seasonal ingredients.</td> <td style="text-align: center; padding: 5px;">1 – 2 marks</td> </tr> <tr> <td style="padding: 5px;">No answer worthy of credit.</td> <td style="text-align: center; padding: 5px;">0 marks</td> </tr> </table> <p>Indicative content</p> <p>Environmental</p> <ul style="list-style-type: none"> • Buying fruit and vegetables in season reduces food miles. • Reducing food miles can reduce carbon dioxide emissions/carbon footprint. • Buying meat from a local source means it has not been over packaged or travelled far. • Locally grown vegetables and fruit often sold loose and unpackaged. • Storage may be reduced e.g. chilling and therefore reduction in the use of energy. <p>Economic</p> <ul style="list-style-type: none"> • Shopping locally saves on fuel costs for producer, supplier and customers. • Supports the local economy and the farmers, producers, processors, transportation etc • Seasonal/locally produced foods are plentiful and therefore cheaper. • Often cheaper to buy as they do not include unnecessary packaging or production costs. • Often reduces waste as people may be less likely to buy in large quantities – shop little and more often. 	Responses show thorough knowledge and understanding of buying locally produced and seasonal ingredients. Detailed and factual descriptions are given which relate to buying locally and clearly describe locally produced/seasonal ingredients.	5 – 6 marks	Responses show good knowledge and understanding of buying locally produced and seasonal ingredients. Factual descriptions are given, some of which describe locally produced / seasonal ingredients.	3 – 4 marks	Responses show basic knowledge and understanding of buying locally produced and seasonal ingredients. Limited descriptions are given which attempt to describe locally produced/seasonal ingredients.	1 – 2 marks	No answer worthy of credit.	0 marks	6
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		<p>Quality food</p> <ul style="list-style-type: none"> • Buying meat from a local source means that the meat can be fresher. • Freshly picked fruit and vegetables are better nutritionally because they are fresher and contain more water-soluble vitamins, which are lost during storage. • Food grown naturally in season often has a better flavour. <p>Ethical</p> <ul style="list-style-type: none"> • Locally produced meat is usually better for animal welfare as the animals do not need to travel far to be slaughtered. • More likely to be farm reared / free range animals so better for animals. • Customer knows the food source/supply and can reject anything they don't like. <p>Other relevant responses should be credited.</p>	
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06	2	<p>Explain how food marketing can influence the food we buy.</p> <p>You may support your answer with examples.</p> <p>Marking guidance</p> <p>This question is assessed against AO2.</p> <p>Award one mark for each different response given from the list below OR two marks for each well explained response.</p> <p>Economic</p> <ul style="list-style-type: none"> • Multi buy offers such as 3 for the price of 2 encourage customers to buy more than they need. • Price reductions and special offers. • Meal deals eg lunch meal deals – main, side and drink. Main meal deals – main, side, dessert and drink. • Loyalty cards – points add up for customers which can be used for money off or other deals eg free product vouchers based on previous purchases. <p>Trends</p> <ul style="list-style-type: none"> • Product marketing to appeal to specific groups, eg different ages, culture and genders. • Identifying and acting on food trends – eg the rise in veganism, high protein shakes/snacks, low salt/fat/sugar foods. 	6
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		<p>Health/ethical</p> <ul style="list-style-type: none"> • Health promotions and claims eg diets, vegan, healthy eating, fortification of foods, health claims, special claims, fitness foods, probiotics, lowering cholesterol. • Promotion of ethical issues such as fair trade, organic, recyclable, lion mark, little red tractor etc. <p>Celebrity/Advertising</p> <ul style="list-style-type: none"> • Food products are advertised on TV, internet, social media, radio, newspapers and magazines – brand loyalty can be built upon. • Promotional leaflets may be sent through the post, or dropped door to door. • Newspaper, magazine and tv advertisements on digital and plasma screen in shopping centres posters and billboards. • Use of celebrities to promote products (accept named celebrity to exemplify answer). • Free samples to taste or try in store. • Product placement eg offers at the end of aisles. • Leaflets and recipe cards instore. • Bright packaging e.g. cartoons to appeal to children. • Positioning of food in supermarkets can appeal to different groups e.g. children lower shelves. <p>Convenience/Technology</p> <ul style="list-style-type: none"> • Marketing to promote convenience foods and timesaving ready meals and snacks. • Recipe boxes which contains (virtually) every ingredient needed + recipe to make a meal from scratch. • Food blogs online. • Use of ‘cookies’ on digital appliances to track consumer preferences and buying habits. <p>Time/Occasion</p> <ul style="list-style-type: none"> • Limited edition products released to gain consumer interest. • Marketing of seasonal foods and annual celebrations eg Christmas, Easter, Valentines, Mother’s Day etc. <p>Any other valid responses should be credited.</p>	
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06	3	<p>Give two advantages and two disadvantages of buying fair trade ingredients and foods.</p> <p>Marking guidance</p> <p>This question is assessed against AO1(b).</p> <p>Award 1 mark for each valid point, either from the list below or other relevant responses worthy of credit</p> <p>Advantages of Fairtrade food:</p> <ul style="list-style-type: none"> • Fair trade means that the producer receives a guaranteed and fair price for their product regardless of the price on the world market. • This allows for a more stable income for the farmers, their families and the communities they live in. • Farmers can afford to feed, educate and take care of their children. • Fairtrade can improve food security, which is linked to economic growth and stable income. This allows more money to be invested in growing more crops and improving communities. • Fair trade foods have ethical standards which are kinder to the environment, farmers are encouraged to farm naturally and in a sustainable way. • Money and some of the profits from some of the big supermarkets and producers can be reinvested into the local community in health and educational projects. <p>Disadvantages of Fairtrade foods:</p> <ul style="list-style-type: none"> • They are usually more expensive. • Only about 25% of the premium customers pay for Fairtrade goes back to the farmer/producer. • It is expensive for farmers to join and stay in the Fairtrade scheme. • The farmers and families working on the land are often paid very little money and have very poor income, working and living conditions. • There is a limited choice of food products and ingredients. • They are often known as ‘Cash crops’ which refers to the fact that a lot of foods are grown in the developing countries for export but often leaves locals without enough foods for themselves and their families. • Fairtrade products can be bad for a country’s economy because they determine what crop is grown and make that country dependent on it. • Food is imported which increases the carbon footprint/environmental impact. <p>• Other relevant responses should be credited.</p>	4
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