

Marking criteria: Task 1 Food investigation

The food investigation is assessed in three sections as shown below:

Section	Criteria	Maximum marks
A	Research	6
B	Investigation	15
C	Analysis and evaluation	9
Total		30

Food investigation assessment

Students will investigate the working characteristics and the functional and chemical properties of a particular ingredient through practical investigation. They will produce a report which will include research into 'how ingredients work and why'.

Outcome: Written or electronic report including photographic evidence.

The inclusion of photographic evidence is to mitigate against plagiarism and is for authentication purposes.

Assessment: Students produce a report of between 1,500–2,000 words (approx. 6–8 sides of A4 or A3 equivalent). Practical investigations are a compulsory element of this non-exam assessment.

Time: Not to exceed 10 hours.

Content: Students will individually record their practical investigation and draw conclusions. The report could include a range of communication methods including: charts, graphs and diagrams. Specialist terminology will be used to clearly communicate the research and investigation findings. The report must include photographic evidence authenticating the practical investigation.

Section A: Research (6 marks)

Students carry out research into the ingredients to be investigated. The research will demonstrate how ingredients work and why. The outcome of the research should clearly inform the nature of the practical investigation and be used to establish a hypothesis or prediction for the food investigation task.

Students should:

- analyse the task, explaining the background research
- carry out secondary research, using different sources, focusing on the working characteristics, functional and chemical properties of the ingredients
- analyse the research and use the findings to plan the practical investigation
- establish a hypothesis/predict an outcome as a result of the research findings. The hypothesis should be a statement which may be proved or disproved.

Mark	Description
5-6	<ul style="list-style-type: none">• Relevant, detailed and concise research into how ingredients work and the reasons why.• Detailed explanation shows a high level of understanding of how the research has been used to inform the practical investigation.• Planned and justified a detailed investigation, related to the research with a clear and focused hypothesis or prediction.
3-4	<ul style="list-style-type: none">• Relevant research into how ingredients work and the reasons why.• Explanation of how the research is used to inform the investigation.• Planned an investigation which relates to the research, some justification given. A hypothesis or prediction has been stated.
1-2	<ul style="list-style-type: none">• Limited research into how ingredients work and the reasons why.• Limited explanation of how the research may be used to inform the investigation.• Limited evidence of planning, with a basic approach to the investigation. A basic hypothesis or prediction has been stated.
0	Nothing worthy of credit.

Section B: Investigation (15 marks)

Students carry out practical investigations, related to the hypothesis or prediction, which demonstrate understanding of how ingredients work and why. Students will record the results of the practical investigation.

Students should:

- Investigate and evaluate how ingredients work and why through practical experimentation. Each investigation should be related to the research and have a clear aim which can then be concluded.
- The number of investigations will be determined by the complexity of the investigations.
- A range of appropriate testing methods should be identified and carried out to record the results eg annotated photographs, labelled diagrams, tables, charts, sensory testing methods, viscosity tests.

Mark	Description
11-15	<ul style="list-style-type: none">• Practical investigations show detailed and high level knowledge and understanding of how ingredients work and why with a clear link to the hypothesis or prediction.• A wide range of testing has been carried out to formulate the results.• Practical investigations are recorded and meticulously explained using methods such as: graphs, tables, charts, sensory analysis methods, labelled diagrams, annotated photographic evidence.
6-10	<ul style="list-style-type: none">• Practical investigations/experiments show very good knowledge and understanding of how ingredients work and why with a link to the hypothesis or prediction.• A range of testing has been carried out to formulate the results.• Practical investigations are recorded with very good explanation using methods such as: graphs, tables, charts, sensory analysis methods, labelled diagrams, annotated photographic evidence.
1-5	<ul style="list-style-type: none">• Practical investigations/experiments show some knowledge and understanding of how ingredients work with some links to the hypothesis or prediction.• Some testing has been carried out to formulate the results.• Practical investigations are recorded with limited explanation.
0	Nothing worthy of credit.

Section C: Analysis and evaluation (9 marks)

Students will analyse and evaluate the results of the investigation and reflect upon their findings. Explanations will demonstrate how the results can be applied in practical food preparation and cooking.

Students should:

- analyse and interpret the results of the investigative work. The results will be linked to the research and data explaining the working characteristics, functional and chemical properties of the ingredient(s)
- evaluate the hypothesis/prediction with justification
- explain how the results/findings can be applied in practical food preparation and cooking.

Mark	Description
7-9	<ul style="list-style-type: none">• Detailed, accurate interpretation and analysis of the results with justified conclusions for all aspects of the hypothesis/investigation.• The report demonstrates an in-depth and specialist understanding of how ingredients work and why.• Detailed explanation/reflection of how the results can be applied when preparing and cooking food.• The report is communicated in a structured and coherent manner with accurate use of technical language.
4-6	<ul style="list-style-type: none">• Relevant interpretation and analysis of the results with conclusions of the hypothesis/investigation with some justification.• The report demonstrates good understanding of how ingredients work and why.• Explanation and review of how the results can be applied when preparing and cooking food.• The report is communicated with clarity and with use of technical language
1-3	<ul style="list-style-type: none">• Some analysis of the results from the hypothesis/investigation and an attempt at drawing conclusions.• The report demonstrates some understanding of how ingredients work and why.• Limited explanation of how the results can be applied when preparing and cooking food.• The report is communicated at a simplistic level with a limited use of technical vocabulary.
0	Nothing worthy of credit.

Marking criteria: Task 2 Food preparation assessment

'The Food preparation assessment' is assessed in five sections as shown below:

Section	Criteria	Maximum mark
A	Researching the task	6
B	Demonstrating technical skills	18
C	Planning for the final menu	8
D	Making the final dishes	30
E	Analyse and evaluate	8
Total		70

Food preparation assessment

In this task, students will prepare, cook and present a final menu of three dishes to meet the needs of a specific context. Students must select appropriate technical skills and processes and create 3–4 dishes to showcase their skills. They will then produce their final menu within a single period of no more than 3 hours, planning in advance how this will be achieved.

Students must work independently eg making their own judgements about cooking methods and making changes to recipes to improve palatability.

Students must work safely and hygienically. It is compulsory that students will adhere to food safety principles at all times throughout this assessment.

Students apply their knowledge of food safety principles within the planning for the 3 hour assessment (Section C). The application of food safety principles will be credited and assessed when making the final dishes (Section D). If a teacher has to intervene to prevent unsafe or unhygienic practices, this should be reflected in the final mark awarded to the student as they will not be demonstrating technical skills or use of equipment competently.

Outcome: Written or electronic portfolio including photographic evidence authenticating the practical outcomes. Photographic evidence of the three final dishes must be included.

Assessment: Students will produce a concise portfolio. Students will prepare, cook and present a final menu of three dishes within a single period of no more than 3 hours, planning in advance how this will be achieved. On completion of the making of the final dishes, students will analyse and evaluate the outcomes through sensory testing, nutritional analysis, costing and identify improvements to their dishes. The portfolio is not to exceed 20 sides of A4 or A3 equivalent. A menu is a selection of three dishes that are produced to meet the demands of the chosen task.

Time: Not to exceed 20 hours (including up to 3 hour final assessment within a single block period).

Students create practical outcomes and demonstrate the technical skills listed in [Food preparation skills](#). Students create, plan, prepare, cook and present a three dish menu to meet the needs of their chosen task and allow them to showcase their food preparation skills. Two assessment criteria give students the opportunity to gain marks for demonstrating their food preparation skills – 'demonstrating technical skills' and 'making the final dishes'.

Excellent performance is characterised by demonstrating a complex skill to an excellent standard. In many instances, what constitutes a 'complex' skill will be determined in part by the ingredients used, processes and techniques carried out, and the dish selected by the student. The complexity and challenge of the dishes is linked to the skills involved in producing the dishes. The more complex the skills, the higher the level of demand. To provide greater clarification, the table below provides dishes that could be considered complex, medium demand and basic skill level in the context of three of the skill groups in this specification

Skill 10: Making a dough	
Complex (highest mark band)	Make pasta dough, roll to the required thickness, add a filling, shape the pasta accurately eg tortellini/ravioli and cook accurately. This demonstrates the execution of technical skills and processes to an excellent standard.
Medium demand	Make pasta dough, roll to the required thickness and make pasta sheets for a pasta dish. This demonstrates the execution of technical skills and processes to a good standard.
Basic (lowest mark band)	Use ready-made pasta in the making of a dish but demonstrate other processes in the dish eg slicing meat. This demonstrates the execution of technical skills/processes to a basic standard.

Skill 11: Raising agent – Steam as a raising agent	
Complex (highest mark band)	Make choux pastry, correct consistency and piped accurately. Take out of the oven at the correct time with well risen and crisp pastry. This demonstrates the execution of technical skills and processes to an excellent standard.
Medium demand	Make choux pastry, correct consistency but piping not uniform. Take out of the oven at the correct time with well risen and crisp pastry. This demonstrates the execution of technical skills and processes to a good standard.
Basic (lowest mark band)	Make a simple batter eg Yorkshire pudding. This demonstrates the execution of technical skills and processes to a basic standard.

Skill 2: Knife skills: Meat, fish or alternatives	
Complex (highest mark band)	Fillet a fish, removing the bone with no excess waste. Cook fish correctly and make into a fish dish. This demonstrates the execution of technical skills and processes to an excellent standard.
Medium demand	Remove the skin from a filleted fish and there is some waste. The fish is cooked well and made into a fish dish. This demonstrates the execution of technical skills and processes to a good standard.
Basic (lowest mark band)	Use pre-filleted fish to make a fish dish. This demonstrates the execution of technical skills/processes to a basic standard

Section A: Researching the task (6 marks)

Students will research and analyse the: life stage/dietary group or culinary tradition related to the task.

Students should:

- analyse the task by explaining the research requirements
- carry out relevant research and analysis related to the: life stage, dietary group or culinary tradition
- identify a range of dishes eg by mind-mapping, or using annotated images
- select and justify a range of technical skills to be used in the making of different dishes.

Mark	Description
5-6	<ul style="list-style-type: none">• Relevant, concise and accurate research that shows discrimination when selecting and acquiring information to answer the task.• Detailed understanding and analysis of the dietary group, life stage or culinary tradition.• Selected a varied range of relevant dishes closely reflecting the research and chosen task.
3-4	<ul style="list-style-type: none">• Relevant research carried out related to the task.• Includes analysis of the dietary group, life stage or culinary tradition.• Selected a range of relevant dishes reflecting the research and chosen task.
1-2	<ul style="list-style-type: none">• Limited research carried out.• Limited analysis of the dietary group, life stage or culinary tradition.• Selected some trial dishes reflecting the research and chosen task.
0	Nothing worthy of credit.

Section B: Demonstrating technical skills (18 marks)

Students will make 3–4 dishes to showcase their technical skills.

Students should:

- demonstrate technical skills in the preparation and cooking of three to four dishes. Refer to the [Food preparation skills](#) section of the specification
- select and use equipment for different technical skills in the preparation and cooking of selected dishes. Food safety principles should be demonstrated when storing, preparing and cooking
- identify the technical skills within each dish. Photographic evidence will be needed to authenticate the technical skills.

Students will select three dishes to make which allow them to showcase their technical skills to make for their final menu. The final dishes will relate to the task and research and be dishes that have not been made previously.

For example, a student could make the following initial dishes to demonstrate technical skills:

1. Fish pie (**technical skills shown:** filleting fish, making a sauce, vegetable preparation, piping potato).
2. Beef lasagne (**technical skills shown:** pasta making, sauce making, vegetable preparation).
3. Traditional quiche (**technical skills shown:** shortcrust pastry, lining a flan ring).
4. Flavoured bread rolls (**technical skills shown:** bread making: kneading, shaping).

For the final menu, they could choose to produce:

1. Fish cakes with parsley sauce.
2. Cannelloni with homemade pasta and tomato ragu sauce.
3. Roasted vegetable flan with reduced fat ingredients to improve the nutritional properties.

Students will be rewarded for the use of a range of technical skills and the quality of outcomes achieved. The complexity and challenge of the dishes produced is linked to the complexity of the skills involved in producing the dish. To achieve the top bands, students must attempt complex skills. Selecting unchallenging skills prevents candidates from reaching the top mark band. As a guide, please see the examples in [Food preparation assessment](#).

Mark	Description
15–18	<ul style="list-style-type: none"> • Competently executes a wide range of complex technical skills/processes(eg filleting fish or cutting vegetables with precision and accuracy eg julienne) to produce excellent quality dishes. • Selects and uses appropriate equipment confidently and accurately. • Extensive review of technical skills that leads to appropriate and justified final dishes.
10–14	<ul style="list-style-type: none"> • Executes technical skills/processes with accuracy, including some complex technical skills (eg filleting fish or cutting vegetables with precision and accuracy eg julienne) to produce very good quality dishes. • Selects and uses appropriate equipment accurately. • Very good review of technical skills leads to appropriate final dishes.
5–9	<ul style="list-style-type: none"> • Demonstrates technical skills/processes with some accuracy to produce good quality dishes. • Selects and uses equipment with some accuracy. • Good review of technical skills leads to appropriate final dishes.
1–4	<ul style="list-style-type: none"> • Basic technical skills/processes (eg slicing raw meat, peeling fruits and vegetables) used to produce adequate quality dishes. • Difficulty in using some equipment. • Some review of the technical skills leads to the final dishes.
0	Nothing worthy of credit.

Section C: Planning for the final menu (8 marks)

As a result of demonstrating technical skills, students will provide explanation for the final three dishes related to eg ingredients, processes, technical skills, nutrition, food provenance, cooking methods and portion size. A time plan will be produced for the final three dishes demonstrating dovetailing of different processes.

Students should:

- justify the appropriateness of the **final** dishes in terms of eg technical skills, nutrition, ingredients, cooking methods, food provenance, sensory properties and portion size
- produce a detailed time plan for the production of the final three dishes including appropriate techniques. Within the plan, food safety principles will be demonstrated when storing, preparing, cooking and presenting the final dishes
- demonstrate appropriate use of the three hours to dovetail tasks to prepare, cook and present the final three dishes
- not repeat any dishes from the 'demonstrating technical skills' stage when making their final menu.

Mark	Description
7-8	<ul style="list-style-type: none">• Detailed review and full justification of the choice and appropriateness of the final three dishes related to the task and research eg nutrition, ingredients, cooking methods.• Detailed, realistic, logical and accurate plan including selecting appropriate techniques for the making of the final dishes.• The time plan will include accurate timings, reference to food safety, relevant and accurate dovetailing.
5-6	<ul style="list-style-type: none">• Reviews and explains the choice and appropriateness of the final dishes related to the task and research eg nutrition, ingredients, cooking methods.• Produced a clear, logical and accurate plan including selecting appropriate techniques for the making of the final dishes with some dovetailing. The time plan will include appropriate timings, reference to food safety, with appropriate dovetailing.
3-4	<ul style="list-style-type: none">• Limited reasons for choice of the final dishes eg nutrition, ingredients, cooking methods.• Produced a plan for the making of the final dishes. The time plan will include some appropriate timings, reference to food safety and limited dovetailing.
1-2	<ul style="list-style-type: none">• The justification for the choice of the final dishes is not clear.• Simplistic plan for making the final dishes, reference to food safety with several inaccuracies.
0	Nothing worthy of credit.

Section D: Making the final dishes (30 marks)

Students will prepare, cook and present a menu of three dishes within a single period of no more than three hours.

Students should prepare, cook and present the final dishes, demonstrating:

- selection and use of equipment for different technical skills in the preparation and cooking of the final three dishes
- knowledge and application of food safety principles (including temperature control) when storing, preparing, cooking and presenting the final three dishes
- selection, knowledge and use of ingredients when producing different dishes
- appropriate use of the three hours to demonstrate: technical skills, processes and the use of equipment
- execution of a range of technical skills with accuracy
- good judgement with regard to cooking times and methods and the sensory properties of each dish
- organisation and good planning using the time plan and linking tasks within the 3 hours
- a range of finishing techniques to produce a high standard of presentation of the final dishes.

Students must include photographic evidence of the final dishes.

Students will be rewarded for the use of a range of technical skills and the quality of outcomes achieved. The complexity and challenge of the dishes produced is linked to the complexity of the skills involved in producing the dish. To achieve the top bands students must attempt complex skills. Selecting unchallenging skills would prevent students reaching the top mark band. Please see section [Food preparation assessment](#) for more guidance.

Mark	Description
25-30	<ul style="list-style-type: none"> • Competently executes a wide range of complex technical skills and processes to an excellent standard (such as filleting fish or cutting vegetables with precision and accuracy eg julienne) in the making of the three final dishes. • Selects and uses appropriate equipment with precision and accuracy. • The three final dishes show a high level of demand, complexity and challenge. • Final three dishes include a wide range of finishing techniques such as garnishing and decoration eg piping. All dishes are accurately presented with attention to detail and finished to an excellent standard. • Excellent evidence of time management. All three dishes produced very successfully within the three hour period. The student followed the time plan closely using the correct sequence with excellent linking and application of food safety principles.
19-24	<ul style="list-style-type: none"> • Competently executes a range of technical skills, including some complex skills (such as filleting fish or cutting vegetables with precision and accuracy eg julienne) to a very good standard in the making of the three final dishes. • Selects and uses appropriate equipment accurately. • The three final dishes show complexity and challenge. • The three final dishes show a range of appropriate finishing techniques and are presented to a very good standard. • Very good evidence of time management. All three dishes were produced successfully within the 3 hour period. The student followed the time plan using the correct sequence with very good linking and application of food safety principles.
13-18	<ul style="list-style-type: none"> • Executes technical skills and processes to a good standard (such as cutting vegetables accurately eg baton) in the making of at least two final dishes. • Selects and uses appropriate equipment with some accuracy. • At least two of the final dishes show some demand and challenge. • The final three dishes show some appropriate finishing techniques such as garnishing and decoration and are presented to a good standard. • Good evidence of time management. All three dishes were produced within the 3 hour period. The student followed the time plan in a logical sequence with good linking and application of food safety principles.
7-12	<ul style="list-style-type: none"> • Executes technical skills and processes with some inaccuracies in the making of the final dishes. • For the majority of the processes appropriate equipment selected and used with some accuracy. • Final dishes show some demand but limited level of skill. • Final three dishes include some finishing techniques but lack of consideration related to some of the presentation. • Satisfactory attempt to follow the time plan with adequate application of food safety principles.
1-6	<ul style="list-style-type: none"> • Limited/basic technical skills (eg slicing raw meat, peeling fruits and vegetables) and processes used with inaccurate outcomes in the making of the final dishes. • Some attempt to select appropriate equipment. • Final dishes lack demand and include mainly basic skills. • Final three dishes are of a basic standard with a lack of appropriate finish and presentation. • Time plan not used for most or all of the making of the final dishes.
0	Nothing worthy of credit.

Section E: Analyse and evaluate (8 marks)

Students will carry out sensory evaluation and record the results for all of their practical dishes. For the final dishes, students will carry out and record nutritional analysis, costing and identify improvements to their dishes.

Students should:

- record and analyse the sensory properties (taste, texture, aroma and appearance) of the three final practical dishes
- carry out nutritional analysis of the three final dishes
- analyse the cost of the three final dishes.

Clear links should be evident from analysing the data and information when reviewing the completed work. This leads to qualified suggestions for improvements/further modifications to the final dishes. This could include: nutrition, skills, sensory characteristics, presentation of the dishes.

Mark	Description
7-8	<ul style="list-style-type: none">• Accurate nutritional analysis data for the three final dishes which is fully explained with conclusions and recommendations. Accurate and excellent knowledge of nutrition is demonstrated.• Detailed and appropriate sensory testing with detailed analysis and evaluation.• Final dishes are costed with the results of this costing analysed and explained.• Detailed, relevant and creative improvements suggested for the final dishes.
5-6	<ul style="list-style-type: none">• Nutritional analysis for the three final dishes is explained with conclusions and some recommendations suggested. Very good knowledge of nutrition is demonstrated.• Sensory testing with very good analysis and evaluation.• Final dishes are costed with some analysis.• Relevant improvements suggested for the final dishes.
3-4	<ul style="list-style-type: none">• Nutritional analysis for the three final dishes includes some conclusions. Good knowledge of nutrition is demonstrated.• Sensory testing with some analysis.• Some costing of the final dishes with limited analysis.• Some suggested improvements of the final dishes.
1-2	<ul style="list-style-type: none">• Limited or no nutritional analysis is carried out for the final dishes.• Evidence of sensory testing with little or no analysis.• Little or no evidence of costing of the final dishes.• Limited or no improvements are suggested for the final dishes.
0	Nothing worthy of credit.