



Model Assignment

Level 3 Cambridge Technicals in Science for Technicians

Unit 17: Food Technology

Y/507/6164

Issued July 2015

Entry code	Title	Qualification Number (QN)
05848	OCR Level 3 Cambridge Technical Foundation Diploma in Science for Technicians	601/7460/2
05849	OCR Level 3 Cambridge Technical Diploma in Science for Technicians	601/7461/4

Contents

Guidance for tutors on using this assignment	3
General	3
Before using this assignment to carry out assessment	3
When completing the assignment	4
After completing the assignment	5
Reworking the assignment.....	5
Modifying the model assignment.....	5
General information for learners	7
Assignment for learners.....	9
The tasks	
Task 1 : Investigate the main features of food manufacturing	9
Task 2 : Investigate the importance of food safety in food manufacturing processes	10
Task 3 : Investigate food quality as a consumer	11
Task 4 : Carry out testing of an identified food product.....	12
Evidence Checklist	13

Please note:

You can use this assignment to provide evidence for summative assessment, which is when the learner has completed their learning for this unit and is ready to be assessed against the grading criteria.

You can use this assignment as it is or you can modify it or you can write your own and we give more information in this document under guidance for tutors.

ALL THESE MATERIALS MAY BE PHOTOCOPIED. Any photocopying will be done under the terms of the Copyright Designs and Patents Act 1988 solely for the purposes of assessment.

Guidance for tutors on using this assignment

General

OCR Cambridge Technical model assignments are available to download from our website: www.ocr.org.uk.

The purpose of this assignment is to provide a scenario and set of tasks that are typical of how food technologists e.g. Quality Assurers, would use testing equipment e.g. temperature probe, to enable you to assess your learner against the requirements specified in the grading criteria. The tasks are intended to give a work-relevant reason for applying the skills, knowledge and understanding needed to achieve the unit.

This assignment will not instruct learners how to meet the highest grade. Whether learners achieve a pass, merit or distinction will depend on what evidence they produce.

You can modify the examples we provide in this assignment to make it more relevant to your local or regional needs. Please refer to the information under 'Modifying the model assignment' later in this section.

You don't have to use this assignment. You can use it as a guide to help you to design your own assignment and we provide an assignment checking service. You'll find more information on these matters in the qualification handbook in section 8 'Internal assessment'.

In the tasks we'll refer to the format of evidence. Learners are **not** required to follow that format **unless** we tell them otherwise.

It's essential that the work every learner produces is their own. Please make sure you read through the information we give on authenticity in the qualification handbook in section 8 'Internal assessment' and make sure any staff involved in assessment and your learners understand how important authenticity is.

We provide this assignment to be used for summative assessment. You must not use it for practice or for formative assessment.

Before using this assignment to carry out assessment

Learners will need to take part in a planned learning programme that covers the knowledge, understanding and skills of the unit.

When your learners are ready to be assessed they must be provided with a copy of the following sections of this assignment:

- General information for learners
- Assignment for learners
- Evidence Checklist

They may carry out preparation prior to undertaking the tasks and there is no time limit for this.

When completing the assignment

You should use this assignment in conjunction with the unit specification and qualification handbook.

Tutor Information to support the tasks

Documents to support the delivery of this unit are available through a variety of sources. A theme linking the tasks together is helpful when covering the learning outcomes of this unit, to allow learners to understand the process flow, quality aspects and food safety considerations of a chosen product.

Resources to complete the tasks

There are resource requirements for this assignment. Every learner will need access to the following resources:

- Computers for access to resources listed in unit content
- Food testing equipment and samples
- Processing facilities where possible to allow for production of food

Health and Safety and the use of resources

Where practical sessions are included, tutor must carry out relevant risk assessments prior to the practical taking place, e.g. use of ovens, cutting equipment during testing or allergens considerations of learners during taste panels.

Time

You should plan for learners to have 11 -15 hours to complete this assignment.

Learners must be allowed sufficient time to complete all the tasks. The amount of time may vary depending on the nature of the tasks and the ability of individual learners. To help with your planning against each of the tasks we've given an indication of how long it should take. Learners can produce evidence in several sessions.

Format of evidence

Learners have to produce evidence that demonstrates how they have met the grading criteria. At the very least they must produce evidence that meets **all** of the pass criteria. **Please make sure your learners realise that missing just one pass criterion means they will not pass the unit, even if they have successfully met the merit and distinction criteria.**

During practical sessions any identified food product can be used providing it gives full opportunity for a vary of testing to be carried out.

We do not have specific requirements for the format of evidence in this assignment. We have said what format the evidence **could** take for each task. For example, if we say 'You could include a report on ...' the evidence does not have to follow any specific reporting conventions. You can modify the format of the evidence but you must make sure the format does not prevent the learner from accessing the grading criteria.

It is possible that certain formats for evidence can naturally cover several grading criteria and avoid the need for excessive amounts of evidence. For example the report for tasks 1 and 2 can be a good way to pull together evidence to meet several grading criteria. Some elements of task 3 can also be combined with task 4. Tasks 1,2,3 and 4 can use the same food type to provide continuity in examples providing other industry sectors are also explored in examples.

For more guidance on generation and collection of evidence please refer to the section 8 'Internal Assessment' in the *Qualification Handbook*.

Group work

This assignment has not been written to include group work. If you plan to ask learners to work in a team to complete work for assessment e.g. task 4, you have to determine at which point in an assessment task learners can work together.

You must be sure each learner can produce evidence of their own contribution to each grading criterion. You can give constructive feedback to learners about working as a group and direct them on team working skills because evidence of team working skills is not required by the unit.

See our information on authentication, including group work and feedback to learners in the qualification handbook section 8.

If witness statements are used to support learners' evidence, you have to complete an individual statement for each learner.

After completing the assignment

Once the learner has submitted their work to you to be assessed, you must judge or 'mark' the work against the grading criteria for the unit and identify one grade for the unit. For further information about assessment please refer to section 8 'Internal assessment' in the Qualification Handbook.

Your assessment decisions must be quality assured across the cohort of learners in your centre who are being entered for the same unit. This must be done through an internal standardisation process. We give information on internal assessment and standardisation in the qualification handbook.

Reworking the assignment

If you and the learner feel they've not performed at their best during the assessment, the learner can, at your discretion, improve their work and resubmit it to you for assessment. If a learner is working on improving their work before it is resubmitted, you and the learner must continue to make sure the work is the learner's own.

Any feedback you give to the learner must not direct them on how to improve their work. You can identify what area of work could be improved but not detail about how to improve it. You must follow the guidelines given in section 8 of the qualification handbook under 'Authenticity of learner work'.

Modifying the model assignment

The tasks in this assignment allow learners to access to the full range of grades detailed in the grading criteria of this unit.

If you modify this assignment you must **not** change the grading criteria provided in the tasks for the learner or in the evidence checklist. These grading criteria are taken from the unit.

You can modify the scenario to suit your local or regional needs and the tasks may be contextualised to match any changes you have made to the scenario. If you supply your own drawings to support a different scenario these must be sufficiently detailed for learners to complete the tasks.

You can modify the type of evidence and the format it takes, unless we expressly state that evidence must take a specific format.

You must also make sure you avoid discrimination, bias and stereotyping and support equality and diversity. For more information please see the section 'Designing your own assignments for internally assessed units' in the qualification handbook – section 8.

If modifications are made to the model assignment, whether to the scenario alone, or to both the scenario and individual tasks, it's your responsibility to make sure that all grading criteria can still be met and that learners can access the full range of grades.

If you're using this model assignment and delivering the Foundation Diploma or Diploma you have an opportunity to secure meaningful employer involvement by working with an employer to modify it.

General information for learners

Q *What do I need to do to pass this assignment?*

A You need to produce evidence to meet the requirements of **all** the pass criteria for the unit this assignment relates to. If you miss just one pass criterion you will not achieve this unit and receive an unclassified result.

Q *What do I need to do if I want to get a merit or distinction for this assignment?*

A For a merit, you need to produce evidence to meet the requirements of **all** the pass criteria for the unit this assignment relates to **and** you need to produce evidence to meet **all** the merit criteria.

For a distinction, in addition to the above you also need to meet **all** the distinction criteria for this unit.

Q *What help will I get?*

A Your tutor will support you when completing this assignment and will make sure that you know what resources or facilities you need and are allowed to use. We've given your tutor information about how much support they can give you.

Q *What if I don't understand something?*

A It's your responsibility to read the assignment carefully and make sure you understand what you need to do and what you should hand in. If you are not sure, check with your tutor.

Q *I have been told I must not plagiarise, what does this mean?*

A Plagiarism is when you take someone else's work and pass this off as your own or if you fail to acknowledge sources properly. This includes information taken from the Internet.

It's not just about presenting a whole copied assignment as your own, you will also be plagiarising if you use the ideas or words of others without acknowledgement and this is why it's important to reference your work correctly (see Q&A below for more information on referencing).

Plagiarism has serious consequences; you could lose the grade for this unit or you may not be allowed to achieve the whole qualification.

Always remember that the work you produce must be your own work. You will be asked to sign a declaration to say that it is.

Q *What is referencing and where can I find out more information?*

A Referencing is the process of acknowledging the work of others. If you use words and ideas of another person in your assignment, you must acknowledge it and this is done through referencing.

You should think about why you want to use and reference other people's work. If you need to show your own knowledge or understanding about an aspect of subject content in your assignment then just quoting and referencing someone else's work will not show that **you** know or understand it. Make sure it's clear in your work how you are using the material you have referenced **to inform** your thoughts, ideas or conclusions.

You can find more information about how to reference in the [The OCR Guide to Referencing](http://www.ocr.org.uk/i-want-to/skills-guides/) available on our website: <http://www.ocr.org.uk/i-want-to/skills-guides/>.

Q ***Can I work in a group?***

A Yes. However, if you work in a group at any stage you must still produce work that shows your individual contribution. Your tutor can advise you how to do this.

Q ***Does my work for each task need to be in a particular format?***

A You can present your work in a variety of ways, such as hand-written, word-processed, on video, digital media. What you choose should be appropriate to the task(s) and you tutor can advise you. There might be times when you need proof that you have completed the work yourself for example if you do something during work placement that you want to use as evidence the tutor might ask the employer to provide a witness statement. Make sure you check the wording in each task carefully. For each task we'll tell you if your evidence has to be in a specific format:

- If we say use the word 'must' for example, 'You must produce a report' or 'Your evidence/work must include a diagram, then you must produce the work in the stated format.
- If we use the word '**could**' for example 'You could include sketches of your ideas' or 'You could do this by annotating your diagram' this means you are not required to follow the format we have given but you must make sure the work you do produce allows you to demonstrate the requirements of the grading criteria.

If you are unsure about what evidence you need please ask your tutor.

Q ***Can I ask my tutor for feedback on my work?***

A Yes but they can't give you detailed feedback.

We have given your tutor instructions on what kind of things they can say to you and what they can't. For example, they are **not** allowed to tell you exactly what to do to make your work better but they can remind you about what they've taught you and you can use this additional learning to try and improve your work independently. They can say what they've noticed might be wrong with your work, for example if your work is descriptive where an evaluation is required, but your tutor can't tell you specifically what you need to do to move it from a description to an evaluation – you will need to work out what you need to do and then do it for yourself.

Q ***When I have finished, what do I need to do?***

A If you have included the personal details (such as name, address or date of birth) of someone other than yourself in your work, this must be blanked out (anonymised) – your tutor will tell you how to do this. You don't need to do this for information contained in references.

You can complete the evidence checklist to show your tutor where they can find the evidence for each grading criteria in your work. You should make sure your work is labelled, titled and in the correct order for assessing. Hand in the work that you've completed for each task to your tutor. They might ask to see your draft work, so please keep your draft work in a safe place.

Q ***How will my work be assessed?***

A Your work will be marked by somebody in your centre who has been authorised to do so. They will use the information in the grading criteria to decide which grade your work meets. The grading criteria are detailed in each unit and are also given in the tasks within this assignment. Please ask your tutor if you are unsure what the grading criteria are for this assignment.

The tasks

Task 1: Investigate the main features of food manufacturing

(This task should take between 3-4 hours)

Learning Outcome 1: Understand the main features of food manufacturing operations, is assessed in this task.

Your task is to:

Investigate and report on the main features of food manufacturing operations including the links between operations (including support roles) and generic stages in food production.

Pass	Merit	Distinction
P1 Outline food manufacturing sectors		
P2: Explain the stages in food manufacture for one food sector		
Evidence		
<p>You must show the links between operations within food manufacturing and the role of food safety within these links, you could do this in a written report with diagrams to where appropriate to illustrate your work e.g. food company structure (family tree) demonstrating different departments.</p> <p>For P2 one of the following sectors can be used :</p> <ul style="list-style-type: none">• fish• cereal• fruit and vegetable• dairy• meat• confectionary• chilled• frozen		

Task 2: Investigate the importance of food safety in food manufacturing processes

(This task should take between 3-4 hours)

Learning Outcome 2: Understand the importance of food safety in food, is assessed in this task.

Your task is to:

Investigate and report on food safety in food manufacturing operations (manufacturing/processing stages) showing common themes between different sectors i.e. Critical Control Points (CCPs). You will the role of legislation and safety management systems.

Pass	Merit	Distinction
P3: Explain how food contamination is controlled through legislation and hygiene practice	M1: Describe the preventative measures required to ensure food safety	D1: Evaluate the concept of high risk foods in terms of increased risk to customer safety
Evidence		
You must show the importance of food safety within food manufacturing, you could do this in a written report with diagrams to where appropriate to illustrate your work, e.g. process flow of a specific food product showing critical control points.		

Task 3 : Investigate food quality as a consumer

(This task should take between 3-4 hours)

Learning Outcome 3: Understand the importance of quality control in food manufacture

Your task is to:

Think about your perception of quality as a consumer. Investigate and report on the reasons for food quality using appropriate definitions and terminology. Your investigation will include quality issues associated with an identified food product together with factors that could contribute to contamination (physical, bacterial or chemical) and will consider industry standards and regulations.

Pass	Merit	Distinction
P4: Explain the reasons for implementing of quality control	M2: Describe how industry standards and regulations can impact food manufacture	
Evidence		
<p>You must show evidence of your investigation that has considered the quality of a food product.</p> <p>You could present this using a quality log or written report to capture your findings (this could be electronic or paper based) and photographic evidence could support the identification of quality issues.</p> <p>The log or report could include:</p> <ul style="list-style-type: none">• Evidence of sketches created or photos collected during the investigation including relevant quality issues identified.• Comparison work carried out e.g. quality of value, standard and high value supermarket brands.• Evidence of any contamination issues identified.• Practical measure that you have taken to prevent further contamination of when considering its quality.		

Task 4 : Carry out testing of an identified food product

(This task should take between 2-3 hours)

Learning Outcome 4: Be able to test product samples, is assessed in this task.

Your task is to:

Think about the work carried out by a Quality Assurer. Carry out testing of an identified food product. Test results will be recorded and should include quantitative and qualitative data collection. Results can then be analysed against specific product standards.

Pass	Merit	Distinction
P5: Carry out product testing	M3: Present results from testing process	D2: Analyse results from testing process.
Evidence		
<p>You must carry out testing and show the results that have been collected from the testing of your identified food product. Analysis of results must be compared against specific product standards e.g. attributes sheet, product specification, control sample.</p> <p>You could present this using a testing log to capture your data (this could be electronic or paper based) and photographic evidence could support your findings. This must provide evidence of the tools and techniques that you have used.</p> <p>The log could include:</p> <ul style="list-style-type: none">• Evidence of sketches created or photos collected during the testing process including relevant dimensions that illustrate accuracy of your testing.• The testing used and the sample size taken.• Evidence of any calculations used to provide final test results.• Full range of tests that were used to provide qualitative e.g. temperature or size and quantitative data e.g. taste panel or visual appearance comments		

Evidence Checklist

OCR Level 3 Cambridge Technicals in Science for Technicians

Unit 17: Food Technology

LEARNER NAME:

For PASS have you: (as a minimum you have to show you can meet every pass criterion to complete the unit)	Where can your tutor find the evidence? Give page no(s)/digital timings etc.
P1 Outline food manufacturing sectors	
P2: Explain the stages in food manufacture for one food sector.	
P3: Explain how food contamination is controlled through legislation and hygiene practice	
P4: Explain the reasons for implementing of quality control	
P5: Carry out product testing	

For Merit have you:	Where can your tutor find the evidence? Give page no(s)/digital timings etc.
M1: Describe the preventative measures required to ensure food safety	
M2: Describe how industry standards and regulations can impact food manufacture	
M3: Present results from testing process	

For Distinction have you:	Where can your tutor find the evidence? Give page no(s)/digital timings etc.
D1: Evaluate the concept of high risk foods in terms of increased risk to customer safety	
D2: Analyse results from testing process.	