Set assignment

DRAFT

LEVEL 3 CAMBRIDGE ADVANCED NATIONAL (AAQ) IN

IT: DATA ANALYTICS

Certificate H019
Extended Certificate H119
For first teaching in 2025

F202: Spreadsheet data modelling

Introduction

This is Sample Assessment Material (SAM). It is an example set assignment that we publish alongside a new specification to help illustrate the intended style and structure of our set assignments.

During the lifetime of the qualification, updates to the set assignment template may happen. We always recommend you look at the most recent set of past set assignments where available.

Tell us what you think

Your feedback plays an important role in how we develop, market, support and resource qualifications now and into the future. Here at OCR, we want teachers and students to enjoy and get the best out of our qualifications and resources, but to do that we need honest opinions to tell us whether we're on the right track or not. That's where you come in.

You can email your thoughts to **ProductDevelopment@OCR.org.uk** or visit the **OCR feedback page** to learn more about how you can help us improve our qualifications.

Designed and tested with teachers and students

Helping young people develop an ethical view of the world

Equality, diversity, inclusion and belonging (EDIB) are part of everything we do

Summary of updates

Date	Version	Page number	Summary of change
July 2023	1 DRAFT	All	Creation of document

Teacher support

We have a range of support services to help you at every stage, from preparation to delivery.

Our teacher support is designed to make teaching our qualifications straightforward, whether you are an experienced teacher, new to teaching, new to OCR, or not a subject specialist of the qualification you are teaching.

We offer free access to services such as Access to Scripts, ExamBuilder and ActiveResults, and you'll find comprehensive teaching resources and a range of professional development courses on our teacher website, Teach Cambridge.

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- Specification and non-exam assessment advice

- Updates on resource developments and training opportunities

- Information on our subject networks giving an opportunity to share ideas and expertise.

Further help and support

Visit our subject pages to find out more about the assessment and request trial access to **Teach Cambridge**.

Not a registered or approved OCR centre? Discover the benefits of becoming one on the **OCR website**.

Have more questions about teaching OCR qualifications? Explore our **Online Support Centre** or contact our **Customer Support team**.

Contact details are available on the **final page** of the SAM.

Work with us

As one of the major UK exam boards, OCR is responsible for creating and marking exams taken by over a million students each year. We work with over 10,000 professionals to create, check, mark and moderate our assessments.

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People and planet

OCR is part of Cambridge University Press & Assessment, which has clear commitments to champion sustainability, diversity, trust and respect for our people and planet.

We are committed to supporting a curriculum that helps young people develop an ethical view of the world. This enables them to take social responsibility, understand environmental issues and prepare them for the green jobs of the future.

Our equality, diversity, inclusion and belonging principles are that we:

- are respectful and considerate

- celebrate differences and promote positive attitudes to belonging

- include perspectives that reflect the diverse cultural and lifestyle backgrounds of our society

- challenge prejudicial views and unconscious biases

- promote a safe and supportive approach to learning

- are accessible and fair, creating positive experiences for all

- provide opportunities for everyone to perform at their best

- are contemporary, relevant and equip everyone to live and thrive in a global, diverse world

- create a shared sense of identity in a modern mixed society with one humanity.

To learn more, including our work on accessibility in our assessment materials, visit our People and planet page.

OCR-set Assignment

Sample Assessment Material

OCR Level 3 Cambridge Advanced National (AAQ) in IT: Data Analytics (Certificate)

OCR Level 3 Cambridge Advanced National (AAQ) in IT: Data Analytics (Extended Certificate)

F202: Spreadsheet data modelling

Scenario Title: The pop-up healthy snacks shop

This is a sample OCR-set assignment which should only be used for practice**.**

This assignment **must not** be used for live assessment of students.

The live assignments will be available on our secure website, 'Teach Cambridge'.

The OCR administrative codes linked to this unit are:

- unit entry code   F202

- certification code   H019/H119

The regulated qualification numbers linked to this unit are:

TBC

Duration

About 15 hours of supervised time (GLH)
(work that **must** be completed under teacher supervised conditions)

Contents

Information and instructions for teachers
Using this assignment

This assignment provides a scenario and set of related tasks that reflect how a business could use a spreadsheet model to assess the financial viability of a new healthy snacks shop.

The assignment:

- Is written so that students have the opportunity to meet the requirements of all assessment criteria for the unit.
- Will tell students if their evidence must be in a specific format. If the task does not specify a format, students can choose the format to use.
- **Must** be completed under teacher supervision. Any exceptions to this will be stated in the assessment guidance.

You **must**:

- Use an OCR-set assignment for summative assessment of students.
- Familiarise yourself with the assessment criteria and assessment guidance for the tasks. These are given at the end of each student task. They are also with the unit content in **Section 4** of the Specification.
  Assessment guidance is only given where additional information is needed. There might not be assessment guidance for each criterion.
- Make sure students understand that the assessment criteria and assessment guidance tell them in detail what to do in each task.
- Read and understand **all** the rules and guidance in **Section 6** of the Specification **before** your students start the set assignments.
- Make sure that your students complete the tasks and that you assess the tasks fully in line with the rules and guidance in **Section 6** of the Specification.
- Give your students the OCR Level 3 Cambridge Advanced National (AAQ) in IT: Data Analytics **Student guide to NEA assignments before** they start the assignments.

You **must not**:

- Use live OCR-set assignments for practice or formative assessment. This sample assessment material **can** be used for practice or formative assessment.
- Use this sample assessment material for live assessment of students.
- Allow group work for **any** task in this assignment.
- Change any part of the OCR-set assignments or assessment criteria.

Pages 1-4 are for teachers only. Please do **not** give **Pages 1-4** to your students.

You can give **any** or **all** of the pages **that follow** to your students.

Tasks for students and assessment criteria

Unit F202: Spreadsheet data modelling

Scenario Title: The pop-up healthy snacks shop

Scenario

A pop-up shop has been set up to sell healthy snack foods. The busy owner wants a spreadsheet model to analyse the outgoing expenses, sales and profits for two weeks to help to decide whether to make the shop permanent. If the shop is shown to be profitable after two weeks, the owner will make the shop permanent.

Requirements

The owner wants the spreadsheet model to:
- Open with an easy-to-use human computer interface (HCI) which links to the different worksheets
- Store and keep track of stock data
- Store supplier data
- Store daily sales data for a two-week period
- Calculate selling price per unit of each item
- Calculate daily profit for each item
- Calculate which items need reordering and the cost of each order
- Calculate overall profit over the two-week period
- Show the effect on business income if the profit margin is increased or decreased
- Produce a report which analyses the future profitability of the shop and makes appropriate recommendations
- Produce visual representations of:
  - income from the most and least profitable items
  - total outgoings and total income for the two-week period
  - average daily sales of each item during the two-week period
- Be protected by this password: **hea1thy5nacks**

Information

- The cost price of each item is the cost of one item in a pack
- The selling price of each item is 20% higher than the cost price
- The default profit margin is 20%
- A product must be re-ordered when the minimum stock level is reached. The number ordered should bring the product back as close to the maximum stock level as possible
- When an item is reordered, it will arrive the next day and is included in the next day's stock, i.e. if you reorder on Monday, the order will arrive on Tuesday and will need to be included in Tuesday's stock
- The current rental costs are £60 per week

These data sheets have been provided:
- Stock data
- Supplier data
- Sales data
You **must** use them to plan, create and test your spreadsheet.

Task 1
Planning and designing the model

Topic Areas 1 and 2 are assessed in this task.

The task is:

Plan the new spreadsheet model for the pop-up shop using appropriate design tools and documentation.

Prepare a test plan for your spreadsheet model.

You will need to look at the data provided to help you plan.

Your evidence **must** include:

- All your planning documentation.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P1: Identify appropriate SMART success criteria against the purpose and user requirements.	**M1**: **Explain** the constraints for the project.	
P2: Identify the spreadsheet data model structure.	**M2: Identify** the formulae for the spreadsheet data model.	**D1: Identify** the formatting and validation for the spreadsheet data model. Include user comments and appropriate protection.
P3: Identify the HCI features for the spreadsheet.		
P4: Create a test plan to test the useability of the spreadsheet data model.	**M3**: **Create** a test plan to test the technical aspects of the spreadsheet data model.	**D2: Justify** the selection of tests to be used in the test plan through a test strategy.

Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P1	- Students **must** present success criteria as SMART objectives. - The SMART objectives **must** be linked to the purpose and user requirements from the scenario.
M1	There is no assessment guidance for this criterion.
P2	There is no assessment guidance for this criterion.
M2	Calculations **must** be expressed as headings, not cell references.
D1	There is no assessment guidance for this criterion.
P3	There is no assessment guidance for this criterion.
P4	There is no assessment guidance for this criterion.
M3	There is no assessment guidance for this criterion.
D2	Students **must** write a test strategy statement, not a lengthy document.

Advice:

- Remember to clearly reference any information used from books, websites or other sources to support your evidence.

Task 2
Creating and testing the model

Topic Areas 2 and 3 are assessed in this task.

The task is:

Create and test the spreadsheet model for the pop-up shop, based on the design documentation you produced in **Task 1**.

You will need to use the data provided.

Your evidence **must** include:

- Your spreadsheet data model.
- Your completed test plan with screenshots of full results and evidence of re-tests as required. Use the test plan template provided on **Page 13**.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P5: Produce a spreadsheet data model based on the design documentation.	**M4: Produce** a functioning spreadsheet data model based on the design documentation.	
P6: Use formatting in the spreadsheet data model. **P7: Use** simple formulae in the spreadsheet data model.	**M5: Use** linked worksheets and functions in the spreadsheet data model.	**D3: Use** validation, protection and data manipulation tools in the spreadsheet data model.
P8: Carry out end testing of the spreadsheet data model and record the outcomes in a test plan.		

Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
In **Task 2**, ideally students will follow the plans they made in **Task 1**. However, if students deviate from their plans they must **not** be penalised when assessing **Task 2**. Students might wish to reflect on any deviations in their evaluation.	
P5	• There is no assessment guidance for this criterion.
M4	• There is no assessment guidance for this criterion.
P6	• There is no assessment guidance for this criterion.
P7	• There is no assessment guidance for this criterion.
M5	• There is no assessment guidance for this criterion.
D3	• There is no assessment guidance for this criterion.
P8	• Students **must** use screenshots in their test documentation. • If students have **not** used the test plan template provided, they must **not** be penalised when assessing **P8**. Any relevant test plan document is acceptable.

Advice:

• You must use your plans as a starting point, but you might need to deviate from your plans as you develop your spreadsheet data model. You don't need to update your plans if you do this.

Task 3
Delivering the outcomes

Topic Areas 3 and 4 are assessed in this task.

The task is:

Develop outputs and analysis to demonstrate whether or not the shop should be made permanent.

Create the data validation and error messages section of the technical documentation.

Create user documentation that includes a description of the purpose of the spreadsheet data model, and a step-by-step guide that covers:

- How to use the password to access the spreadsheet data model
- How to use the spreadsheet data model to navigate between worksheets and change the profit margin

Your evidence **must** include:

- Outputs to aid analysis.
- Your technical documentation.
- Your user documentation.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P9: Develop outputs to be used to aid the analysis of the results of the spreadsheet model.	**M6: Produce** an analysis of the trends and/or patterns indicated by the outputs.	**D4: Evaluate** the outcomes of the analysis and make recommendations.
P10: Create the required content of the technical documentation for the spreadsheet data model.		
P11: Create the required content of the user documentation for the spreadsheet data model.		

Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P9	• The evidence can be the spreadsheet data model and/or the outputs.
M6	• Students can present this information in a report or a dashboard.
D4	• Recommendations **must** focus on the question or questions raised in the scenario.
P10	• The task specifies which parts of the technical documentation students need to create. They **must** create these parts **only**. They do **not** need to create full documentation.
P11	• The task specifies which parts of the user documentation students need to create. They **must** create these parts **only**. They do **not** need to create full documentation.

Task 4
Evaluation

Topic Area 5 is assessed in this task.

The task is:

Evaluate your spreadsheet model.

Your evidence **must** include:

- Your completed evaluation.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P12: Compare the user requirement with the spreadsheet data model created.	**M7: Assess** the effectiveness of the HCI features in the spreadsheet data model.	**D5: Evaluate** the effectiveness of the spreadsheet data model and suggest improvements that could be made.

Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P12	- There is no assessment guidance for this criterion.
M7	- The focus is specifically on the HCI features **only**.
D5	- The focus is on the model as a whole.

Template for Task 2

Test number	Test date	Test purpose	Test procedure	Expected result	Actual result	Remedial action required	Retest result

NEA Command Words

The table below shows the command words that may be used in the NEA assignments and/or assessment criteria.

Command Word	Meaning
Adapt	• Change to make suitable for a new use or purpose
Analyse	• Separate or break down information into parts and identify their characteristics or elements • Explain the different elements of a topic or argument and make reasoned comments • Explain the impacts of actions using a logical chain of reasoning
Assess	• Offer a reasoned judgement of the standard or quality of situations or skills. The reasoned judgement is informed by relevant facts
Calculate	• Work out the numerical value. Show your working unless otherwise stated
Classify	• Arrange in categories according to shared qualities or characteristics
Compare	• Give an account of the similarities and differences between two or more items, situations or actions.
Conclude	• Judge or decide something
Describe	• Give an account that includes the relevant characteristics, qualities or events
Discuss (how/whether/etc)	• Present, analyse and evaluate relevant points (for example, for/against an argument) to make a reasoned judgement
Evaluate	• Make a reasoned qualitative judgement considering different factors and using available knowledge/experience
Examine	• To look at, inspect, or scrutinise carefully, or in detail
Explain	• Give reasons for and/or causes of something • Make something clear by describing and/or giving information
Interpret	• Translate information into recognisable form • Convey one's understanding to others, e.g. in a performance
Investigate	• Inquire into (a situation or problem)
Justify	• Give valid reasons for offering an opinion or reaching a conclusion
Research	• Do detailed study in order to discover (new) information or reach a (new) understanding
Summarise	• Express the most important facts or ideas about something in a short and clear form

We might also use other command words but these will be:

- commonly used words whose meaning will be made clear from the context in which they are used
- subject specific words drawn from the unit content.

Examine *with* us

- Build confidence supporting your students with assessment

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