



Set assignment

DRAFT

LEVEL 3 CAMBRIDGE ADVANCED NATIONAL (AAQ) IN

APPLIED SCIENCE

Certificate H051 Extended Certificate H151

For first teaching in 2025

F182: Investigating science

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 <u>Access to Scripts</u>, <u>ExamBuilder</u> and <u>ActiveResults</u>, and you'll find comprehensive teaching resources and a range of professional development courses on our teacher website, <u>Teach Cambridge</u>.

Our OCR subject advisors provide support and information to centres, including:

- 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.

If you would like to find out more about becoming an OCR examiner, please visit **our website** for more information

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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 <u>People and planet page</u>.



OCR-set Assignment Sample Assessment Material

OCR Level 3 Cambridge Advanced National (AAQ) in Applied Science (Certificate)

OCR Level 3 Cambridge Advanced National (AAQ) in Applied Science (Extended Certificate)

F182: Investigating science

Scenario Title: Scientific Investigation Set A

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 F182

certification code H051/H151

The regulated qualification numbers linked to this unit are:

TBC

Duration

About:

- 20 hours of supervised time (GLH) (work that **must** be completed under teacher supervised conditions)
- 5 hours of unsupervised time (work that students can complete independently without teacher supervision)

All this material **can** be photocopied. Any photocopying will be done under the terms of the Copyright Designs and Patents Act 1988 solely for the purposes of assessment.

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Information and instructions for Teachers

Using this assignment

The assignment provides three titles and a set of related tasks. Students are required to undertake a scientific investigation to explore **one** of these three titles with their own research question.

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 they need 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 Applied Science Student guide to NEA assignments before they start the assignments.
- Complete the **Teacher Observation Record** for **Tasks 2**, **3 and 5**. You **must** follow the guidance given when completing it.

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.

Information for delivering tasks

Task	Requirements
General	Students should have practised a variety of practical skills throughout Unit F182, in addition to the practical skills developed in Unit F180, to be able to select from the three titles. Only one title should be selected and explored by each student.
	Each student's investigation needs to be individual and unique from the rest of the cohort. Students may choose to explore similar research questions but, for example, investigate different dependent variables or use distinct methodologies.
Task 1	It is advised that teachers review the research question chosen by students to ensure that it meets the requirements of the assessment criteria and guidance.
	This full method must be checked by the assessor to ensure it is appropriate in terms of safety and for the circumstances of the centre. E.g. any chemicals or equipment chosen are safe for the student to use and that they are competent enough to use them to obtain sufficiently appropriate data for the investigation. The methodology will also need to ensure that the research question can be answered in an appropriate length of time.
Task 2	Appropriate control measures need to be clearly indicated and checked by the classroom teacher before any practical work is carried out.
Task 4	If students are unable to source secondary data due to the unique nature of the research question they have created, secondary data can be supplied by the centre to meet the requirements of M7 .
Task 5	The defence of conclusions could be performed in front of peers or just to an assessor. Students may find access to written notes, presentation slides or summary poster supportive in this task.

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 F182: Investigating Science

Scenario Title: Scientific Investigation Set A

Scenario

You will undertake a scientific investigation to explore **one** of the following titles with your own research question:

- 1. How vitamin C concentration varies in foods.
- **2.** How the temperature affects the rate of a reaction.
- 3. How the surface a ball is dropped onto affects the bounce of the ball.

You must conduct your own investigation where you collect and analyse your own data.

Your investigation must focus on one independent variable that can be measured over a suitable range of values.

Task 1

Prepare for a scientific investigation

Topic Area 1 is assessed in this task.

The task is:

Prepare for your investigation.

Your evidence **must** include:

• A relevant section within your final investigation report

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

Pass	Merit	Distinction
P1: Use research to create an appropriate research question from one of the given investigation titles.	M1: Explain the scientific principles behind the investigation.	D1: Use research to explain how the scientific principles behind the investigation relate to
P2: Construct a hypothesis, and a prediction.		environmental, commercial, and industrial processes.

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	 The research question must include one independent and one dependent variable, and an indication of how investigation will be performed (e.g. via titration, using gas syringe, colorimetry). The data collected for both variables will need to be quantitative. The research should include data that the student can use to help them create their research question, and to allow them to then make a comparison later on between this data and their collected data in M7. The research element of this criterion does not need to be completed under supervised conditions. 		
M1	Students must apply knowledge and understanding from Unit F180 to explain the scientific principles behind the investigation.		
D1	 Students must explain how the scientific principles in M1 and their research question in P1 can relate to real world understanding or applications. Students must explain how the scientific principles behind the investigation relate to environmental, commercial, and industrial processes. If any of environmental, commercial and/or industrial processes are not appropriate, students must explain why. The research element of this criterion does not need to be completed under supervised conditions. 		

Advice:

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

Task 2

Plan the scientific investigation

Topic Area 1 is assessed in this task.

The task is:

Plan your investigation. This will include completing preliminary testing.

Your evidence must include:

- A teacher observation record form
- A relevant section within your final investigation report
- A risk assessment using the template provided

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

Pass	Merit	Distinction
P3: Produce a plan for the full investigation which includes a method for the	M2: Explain the choice of equipment and variables for the full investigation.	D2: Justify the plan using the data from the preliminary testing.
preliminary testing.	M3: Explain the choices for the preliminary testing aspect of your method.	
P4: Use research to complete a risk assessment for your investigation.		
P5: Present the outcomes of your preliminary testing.		

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
P3	 Students must provide a step-by-step method that includes all of the equipment they wish to use, including sizes and quantities, personal protective equipment (PPE) as appropriate, and includes the number of repeats they will do. There must be a separate section describing how the preliminary tests will be carried out. They must state the control variables and account for how they will be controlled throughout the investigation. This could be in the form of a table.
P4	The research element of this criterion does not need to be completed under supervised conditions.
P5	 A results table may be appropriate for most investigations, but qualitative descriptions are also suitable. The teacher observation record form should comment on the independent collection of data from preliminary testing.
M2	 Students must consider how the equipment chosen will help with the collection of valid and high-quality data. Students must explain why each variable (independent, dependent and control) was chosen for this investigation, and explain the range of value(s) they have decided to test.
М3	Students must give reasons for the method and range of variables to be tested in the preliminary testing, and what information they expect to be useful for carrying out the full investigation.
D2	Students must explain any decisions made about modifications to the original plan in relation to the preliminary testing. They must also account for any absence of modifications.

Advice:

- Following the completion of **Task 2**, your teacher will need to ensure that your planned investigation is safe and appropriate for you to do in your school laboratory.
- Remember to clearly reference any information used from books, websites or other sources to support your evidence.

Task 3

Collect and record results for the full investigation

Topic Area 2 is assessed in this task.

The task is:

Follow your method to collect and record results for the full investigation.

Your evidence must include:

- A teacher observation record form
- A relevant section within your final investigation report

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

Pass	Merit	Distinction
P6: Complete the investigation by following your plan safely.	M4: Collect data of sufficient quality to help answer the research	
P7: Collect valid data following your plan.	question.	
P8: Record the data obtained in appropriate ways using correct conventions and units.		

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		
P6	 Students must follow their plan safely, including consideration of the control measures outlined in their risk assessment. The teacher observation record form should comment on the safe carrying out of the procedures. 		
P7	Students must collect data about all of the variables discussed in the plan, i.e. also the control variables.		
M4	The teacher observation record form should comment on the skilful use of apparatus and the accuracy and precision of data collected.		

Task 4

Process the data

Topic Areas 3 and 4 are assessed in this task.

The task is:

Process the data in full and propose conclusions based on the data obtained. You will also need to compare your data with appropriate secondary data.

Your evidence **must** include:

• A relevant section within your final investigation report

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

Pass	Merit	Distinction
P9: Use standard mathematical skills to process data.	M5: Use spreadsheets to appropriately process the data.	D3: Justify the methods used to process and display data.
P10: Use appropriate graphical representation(s) to display data.		
	M6: Calculate percentage uncertainties for the investigation.	D4: Explain the sources of error.
P11: Write appropriate conclusions from the data obtained.	M7: Make valid qualitative comparisons between primary and secondary data.	

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	 Students must use mathematical skills identified in the specification to process their data appropriately. They must show at least one example of their full working out in the written evidence.
P10	Appropriate trendlines and error bars should be included.
P11	 An analysis of the data is required to write appropriate conclusions. A limited scientific explanation is required.
M5	 Students must use spreadsheet packages (e.g. Microsoft Excel) to calculate, for example, standard deviation. Students can also use spreadsheets to help them process and represent data in P9 and P10.
M6	 Students must calculate the percentage uncertainty on each piece of equipment used and the combined uncertainty for each repeat. They must show their full working out in the written evidence.
M7	 Students must make a qualitative comparison between their collected data and one source of appropriate secondary data. The secondary data should come from the research completed in P1.
D3	Students must justify their methods for processing and displaying the data in their report, e.g. the type of graph used, any data they had identified as anomalous, positioning of lines of best fit, etc.
D4	 Students must account for any anomalous results or patterns in the data that do not appear to fit the hypothesis. If there are no anomalous results, students must explain how they arrived at this decision. This should be done qualitatively only.

Task 5

Present and review your investigation

Topic Areas 3 and 4 are assessed in this task.

The task is:

Present and review your investigation.

Your evidence **must** include:

- A Teacher Observation Record form
- A relevant section within your final investigation report

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

Pass	Merit	Distinction
P12: Explain the limitations of the data collected, including the method used to collect the data.	M8: Evaluate the sources of information and secondary data.	D5: Justify suggestions for any improvements that could be made.
		D6: Assess the relevance of your investigation and data to environmental, commercial and industrial processes.
P13: Present your conclusions.		
P14: Defend your conclusions.		

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	 Students should also explain how well they were able to collect good quality data with the techniques and equipment chosen. This should be supported by evidence collected during the investigation. 		
P13	 The research question should be presented, a brief explanation of the methods followed, and the data summarised. The extent to which the research question was answered should be justified. This can be delivered to the assessor and/or peers. 		
P14	 The assessor should ask appropriate questions to enable the student to defend their investigation adequately. For example: Were there any limitations that prevented the research question being answered in full? Are you confident errors had little impact on your results? Are your conclusions justified sufficiently by the data you collected? The teacher observation record form should include the questions posed and comment on how well they were answered following the student's presentation in P13. 		
M8	Students should include judgements on their confidence in the sources used throughout the investigation, e.g. those used to design the method, create the risk assessment, and the secondary data, with reference to reliability and validity.		
D5	 Students should give valid reasons for improvements to the investigation that would improve the conclusion(s) or help answer the research question. Processed data should be used to support any recommendations. If no improvements can be recommended then this needs to be explained using evidence from the investigation. 		
D6	 Students should provide reasons, based on the evidence collected during the investigation, about the relevance of conclusions made to environmental, commercial and industrial processes. If any of environmental, commercial and/or industrial processes are not relevant, students must explain why. 		

Teacher Observation Record Form for Task 2

Use this form to record what is observed.

Unit number:

Read the **guidance notes** below the form **before** you complete the form.

F182

OCR Level 3 Cambridge Advanced National (AAQ) in Applied Science (Certificate)

OCR Level 3 Cambridge Advanced National (AAQ) in Applied Science (Extended Certificate)

Unit title:	Investigating science		
Task number:	2		
Task title:	Plan the scientific investigation		
Student's name:			
Date the activity was			
completed:			
What extra evidence is			
attached to the form?			
The teacher fills in this section:			
This activity relates to assessment criterion P5. For P5, you must comment on the independent collection of data from preliminary testing.			
How does the activity meet the requirements of the Assessment Criteria?			
You must describe: 1. what the student did			
how it relates to the relevant Assessment Criteria			
Teacher's name:			
Teacher's signature:			
Date:			

The **student** fills in this section:

I agree with my teacher's description of how I completed this activity		Yes □
Use this space to make any extra comments.		
Student's signature:		
Date:		

Guidance notes

Both the teacher **and** the student are responsible for completing this form.

The teacher must:

- use the form to describe in detail what they observed the student doing.
- give contextualised details of what the student did and how this relates to the Assessment Criteria.
- say how well the activity was completed in relation to the Assessment Criteria with reasons.
- share what they have written with the student and offer the opportunity to discuss if the student disagrees with what is written.
- reach agreement with the student before the work is submitted for moderation.
- sign and date the form as evidence of agreement.

The student must:

- reach agreement with the teacher before the work is submitted for moderation.
- use the form to show that they agree with the teacher's record of the activity observed.
- sign and date the form as evidence of agreement.

The form must:

- be accompanied by extra evidence, as required by the task.
- provide evidence that is individual to the student.

The form **must not**:

- contain a simple repeat of the Assessment Criteria.
- contain just a list of skills.
- be completed by anyone other than the teacher observing the activity and the student completing the activity.
- be written by the student for the teacher to sign.
- be used to evidence achievement of a whole unit or task in isolation.

Teacher Observation Record Form for Task 3

Use this form to record what is observed.

Read the **guidance notes** below the form **before** you complete the form.

OCR Level 3 Cambridge Advanced National (AAQ) in Applied Science (Certificate)

OCR Level 3 Cambridge Advanced National (AAQ) in Applied Science (Extended **Certificate**)

Unit title: Investigating science Task number: 3 Task title: Collect and record results for the full investigation Student's name: Date the activity was completed: What extra evidence is attached to the form? The teacher fills in this section: What Assessment Criteria does this activity relate to? This activity relates to assessment criteria P6 and M4. For P6, you must comment on the safe carrying out of the procedures for the full investigation. For M4, you must comment on the skilful use of apparatus and the accuracy and precision of data collected. How does the activity meet the requirements of the Assessment Criteria? You must describe: 1. what the student did 2. how it relates to the relevant Assessment Criteria Teacher's name: Teacher's signature: Date:	Unit number:	F182	
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Student's name: Date the activity was completed: What extra evidence is attached to the form? The teacher fills in this section: What Assessment Criteria does this activity relate to? This activity relates to assessment criteria P6 and M4. For P6, you must comment on the safe carrying out of the procedures for the full investigation. For M4, you must comment on the skilful use of apparatus and the accuracy and precision of data collected. How does the activity meet the requirements of the Assessment Criteria? You must describe: 1. what the student did 2. how it relates to the relevant Assessment Criteria Teacher's name: Teacher's signature:	Task number:	3	
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Teacher's signature:			
· ·	Teacher's name:		
Date:	Teacher's signature:		
	Date:		

The **student** fills in this section:

I agree with my teacher's description of how I completed this activity		Yes □
Use this space to make any extra comments.		
Student's signature:		
Date:		

Guidance notes

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- use the form to describe in detail what they observed the student doing.
- give contextualised details of what the student did and how this relates to the Assessment Criteria.
- say how well the activity was completed in relation to the Assessment Criteria with reasons.
- share what they have written with the student and offer the opportunity to discuss if the student disagrees with what is written.
- reach agreement with the student before the work is submitted for moderation.
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The form must:

- be accompanied by extra evidence, as required by the task.
- provide evidence that is individual to the student.

The form **must not**:

- contain a simple repeat of the Assessment Criteria.
- contain just a list of skills.
- be completed by anyone other than the teacher observing the activity and the student completing the activity.
- be written by the student for the teacher to sign.
- be used to evidence achievement of a whole unit or task in isolation.

Teacher Observation Record Form for Task 5

Use this form to record what is observed.

Unit number:

Read the **guidance notes** below the form **before** you complete the form.

F182

OCR Level 3 Cambridge Advanced National (AAQ) in Applied Science (Certificate)

OCR Level 3 Cambridge Advanced National (AAQ) in Applied Science (Extended Certificate)

Unit title:	Investigating science		
Task number:	5		
Task title:	Present and review your investigation		
Student's name:			
Date the activity was completed:			
[
What extra evidence is attached to the form?			
The teacher fills in this section:			
What Assessment Criteria does this activity relate to?			
This activity relates to assessment criterion, P14. For P14, you must comment on the questions posed to the student and comment on how well they were answered.			
-	equirements of the Assessment Criteria?		
You must describe:			
what the student did how it relates to the relevant Assessment Criteria			
2. How it relates to the relevant Assessment Officia			
Teacher's name:			
Teacher's signature:			
Date:			

The **student** fills in this section:

I agree with my teacher's description of how I completed this activity		Yes □
Use this space to make any extra comments.		
Student's signature:		
Date:		

Guidance notes

Both the teacher **and** the student are responsible for completing this form.

The teacher must:

- use the form to describe in detail what they observed the student doing.
- give contextualised details of what the student did and how this relates to the Assessment Criteria.
- say how well the activity was completed in relation to the Assessment Criteria with reasons.
- share what they have written with the student and offer the opportunity to discuss if the student disagrees with what is written.
- reach agreement with the student before the work is submitted for moderation.
- sign and date the form as evidence of agreement.

The student must:

- reach agreement with the teacher before the work is submitted for moderation.
- use the form to show that they agree with the teacher's record of the activity observed.
- sign and date the form as evidence of agreement.

The form must:

- be accompanied by extra evidence, as required by the task.
- provide evidence that is individual to the student.

The form **must not**:

- contain a simple repeat of the Assessment Criteria.
- contain just a list of skills.
- be completed by anyone other than the teacher observing the activity and the student completing the activity.
- be written by the student for the teacher to sign.
- be used to evidence achievement of a whole unit or task in isolation.

Risk Assessment Template

Title of investigation	
Candidate Name	
Date Completed	

Hazardous chemical, procedure or equipment	Hazard	Risk	Control measures	Emergency measures
Example, ethanol (pure)	Highly flammable	Both liquid and vapour can catch fire if exposed to naked flame or sparks	Keep lid on bottle, keep away from naked flame	Do not attempt to put out an ethanol fire with water. A foam extinguisher should be used or place a fire blanket or heatproof mat onto the flame.

Include references for the sources of information used

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.



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