ENERGY & ENVIRONMENT AWARDS

Skills for a greener world

EEA Level 3 End-point Assessment for Gas Engineering Operative

Apprentice Guide

QAN 610/6018/5
ST0155 V1.0 V1.1

Apprentice Guide for

EEA Level 3 End-point Assessment for Gas Engineering Operative

QAN 610/6018/5

Updates to this Guide

Since the first publication of Energy & Environment Awards Gas Engineering Operative Apprentice Guide, the following updates have been made.

Version	Date first published	Section updated	Page(s)
v4.0	April 2026	Revised Section 4	37
v3.0	April 2025	Rebranded	All
v2.0	August 2023	Rebranded and new template	All
v1.0	September 2021	First published	All

At A Glance Component 1 Portfolio Assessment: Stage 1 - Gas Safe® Registration

Date(s):	
Time:	
Location:	
Examination Conditions:	**Not delivered by Energy & Environment Awards**. Your employer/training provider will be responsible for making all the arrangements.

At A Glance Component 1 Portfolio Assessment: Stage 2 - Competency Test (Practical Assessment)

Date(s):	
Time:	
Location:	
Examination Conditions:	With an Energy & Environment Awards assessor in your place of work or training environment
Additional Requirements:	
Assessed and marked by:	Independent assessor/Energy & Environment Awards

At A Glance Component 1 Portfolio Assessment: Stage 3 Work Log Review

Date(s):	
Time:	
Location:	
Examination Conditions:	With an Energy & Environment Awards assessor
Additional Requirements:	
Assessed and marked by:	Independent assessor/ Energy & Environment Awards

At A Glance Component 1 Portfolio Assessment: Stage 4 Interview based on the Work Log

Date(s):	
Time:	
Location:	
Examination Conditions:	With an Energy & Environment Awards assessor in your place of work or training environment
Additional Requirements:	
Assessed and marked by:	Independent assessor/ Energy & Environment Awards

At A Glance Component 2: Knowledge Assessment

Date(s):	
Time:	
Location:	
Examination Conditions:	With an Invigilator
Additional Requirements:	
Assessed and marked by:	Energy & Environment Awards

Introduction

Energy & Environment Awards has been selected by your employer to carry out end-point assessment (EPA) and it is our job to ensure that you are assessed fairly.

How This Apprentice Guide Is Organised

- ✓ Section 1:

  What is in the Apprentice Guide?

- ✓ Section 2:

  An Apprentice's End-point Assessment Journey

- ✓ Section 3:

  End-point Assessment Components

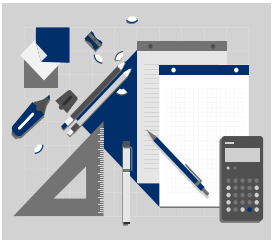
How to Use This Guide

This guide has been split into 3 sections. You can dip into each section that you are working on where you will find useful information, practical advice, tips you need and useful dates to successfully complete your EPA.

Throughout we have used headings and cross referenced to our EPA Gas Engineering Operative (GEO) Specification which provides details of the EPA components.

Section 1: The Basics

What is an Apprenticeship Standard?



An apprenticeship standard is a description of your apprenticeship and it is based on the Gas Engineering Operative standard, which was written by employers. It contains the gas engineering operative's job profile, and describes the knowledge, skills and behaviours (KSBs):

- Knowledge: (as part of KSBs) – specific information, technical detail, and 'know-how' identified as part of the apprenticeship standard that must be evidenced during your end-point assessment
- Skills: (as part of KSBs) – the practical application of knowledge identified as part of the apprenticeship standard that must be evidenced during end-point assessment
- Behaviours (as part of KSBs) – specific mindsets, attitudes or approaches identified as part of the apprenticeship standard that must be evidenced during end-point assessment

The standard can be accessed via the link below:
https://skillsengland.education.gov.uk/apprenticeship-standards/st0155-v1-1

What is an Assessment Plan?

An Assessment Plan is also written by employers and provides details of what is required for you to pass your end-point assessment. It includes details of what you will be assessed on, how each assessment will take place, what methods will be used and who will assess you.

Energy & Environment Awards designed the end-point assessment (EPA) to meet the requirements of the Assessment Plan. The Assessment Plan can be accessed via the link below:
https://skillsengland.education.gov.uk/media/1121/gas_engineering.pdf

What is an end-point assessment (EPA)?

The end-point assessment is the assessments you take at the end of your apprenticeship. Your apprenticeship will typically take 18 months. You will typically spend 18 months on-programme working towards your standard. After this you have a Gateway meeting with your employer or training provider to confirm you are ready for the end-point assessments. The words end-point means that you will be assessed at the end of your on-programme (training) to confirm you have met the standard. Your EPA will be taken in the last 3 months. The end-point assessments consist of 2 components:

- Portfolio Assessment, including Gas Safe® registration, competency test and work log review, which includes an interview based on your work log
- Knowledge Assessment

Each component has a provisional grade and each grade is carried forward to award a final grade. You must pass both components to pass your apprenticeship.

The final grade can be a Fail, Pass or Distinction.

What are the Gateway Requirements?

Gateway is a meeting where your employer, training provider and you ensure that you are confident that you can demonstrate all the KSBs defined in the apprenticeship standard and you are ready for EPA. After the meeting, your training provider will confirm the outcomes of the Gateway meeting by sending a signed document to Energy & Environment Awards. The document confirms that you have met the following Gateway requirements:

- achieved a minimum level 2 in English and maths
- proof of Gas Safe® registration certification for a minimum of four appliances
- compiled a work log of evidence with a mapping document, which the interview will be based on

Your training provider will send copies of these documents to Energy & Environment Awards.

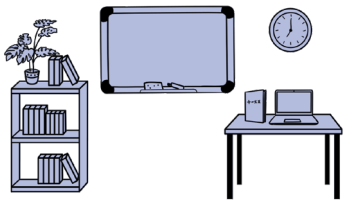
What is the EPA Specification?

The end-point assessment specification provides details of the assessment methods used in your EPA, which:

- KSBs that are covered by each assessment
- KSBs amplification and guidance

The Specifications for Gas Engineering Operative can be accessed via the link below:
https://energyenvironmentawards.co.uk/epa/gas-engineering-operative-level-3-v1-3/

Section 2: Apprentice EPA Journey



Let us Begin Your EPA Journey.

Find a quiet place and read on….

Gas Engineering Operative is a core apprenticeship standard. You must be trained and assessed against the core criteria.

Your EPA journey consists of 3 elements:

- A training programme with on the job, off the job elements, typically 18 months
- Gateway meeting window
- End-point Assessment (EPA) typically 3 months

Your journey begins with the training program. Your employer and training provider are responsible for this part. This is where you will gain the required Knowledge, Skills and Behaviours (KSBs).

How will you be assessed in the end-point assessment?

You will be assessed on the following components, which can be taken in any order:

1. **Portfolio Assessment, including Gas Safe® registration, competency test and work log review, which includes an interview**
2. **Knowledge Assessment**

It is important for you to keep a record of when your 2 components are scheduled, bearing in mind that the Portfolio has several stages. We suggest you use the ‘At a Glance’ tables on page 5 - 6.

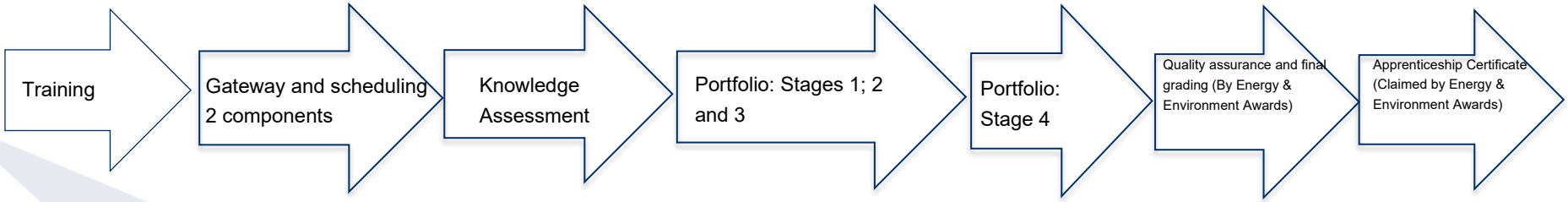
You must pass both components to achieve this qualification. For further guidance refer to Section 3 End-point Assessment Components.

Reasonable adjustments

A reasonable adjustment is any action that helps to reduce the effect of a disability or difficulty that places you at a substantial disadvantage during assessments. If this applies to you make sure you tell your training provider who can make an application for a reasonable adjustment to Energy & Environment Awards on your behalf.

Your EPA Journey in a Diagram

The diagram below illustrates the order of your EPA **journey** from the day you register to your final certification:



Typically, 18 months	You have: Attended a Gateway meeting with your employer/provider. Achieved a minimum level 2 in English and maths. Proof of Gas Safe® registration certification for a minimum of four appliances. Compiled a work log of evidence, which your interview will be based on.	60 Minutes. Multiple-choice 40 questions. Under exam conditions supervised by an invigilator. Face to face. Closed book. **ONLY 1 RESIT ALLOWED**	**Stage 1- Gas Safe® registration: NOT DELIVERED BY Energy & Environment Awards.** The employer/training provider will be responsible for making all the arrangements. **Stage 2 – Competency Test:** Typically half a day to enable the assessment of four appliances. Under examination conditions. Face to face or remote as agreed. Independent assessor. **Stage 3 – Work Log Review**: Independent Assessor only For further details *see below.	**Stage 4 – Interview based on the Work Log** The interview will typically last 1 hour Under examination conditions. Face to face or remote as agreed and recorded using relevant technology. Independent assessors. For further details *see	Awarded Final Grading: Distinction, Pass or Fail.	ESFA will send your Certificate to your training provider or employer. Contact your training provider or employer if you do not receive your certificate.

				below.		

*For further details refer to Section 3 in this Apprentice Guide or Section 2 of the Specification

Section 3: End-point Assessment Components

Now let us continue your journey through EPA. There are 2 components that you must pass to be awarded a certificate.

Component 1: Portfolio, including Gas Safe® registration, competency test, work log review and an interview

Overview

You must complete a portfolio assessment made up of four elements. The elements of the portfolio will be individually assessed and scored. The assessor, appointed by Energy & Environment Awards will combine the scores to award a preliminary mark out of 100 as allocated below:

The four elements **must** be undertaken in this order:

Stage 1: Gas Safe® registration for a minimum of four appliances (before Gateway) – A pass in the four appliances means that 10 marks can be awarded towards the overall portfolio mark. For further details see Step-by-Step Guide below.

Stage 2: Competency Test (practical assessment) which must demonstrate safe practice; outstanding diagnostic, fault finding, and repair skills, excellent communication, recording and customer service skills including relevant energy advice. A maximum of 20 marks will be available to contribute towards the overall portfolio mark. For further details see Step-by-Step Guide below.

Stage 3: Work Log Review will be carried out by an assessor (you are not required to be present for this stage), who will undertake a summative assessment of competence against the standards knowledge, skills and behaviours which are grouped into six areas, each group has been allocated a minimum and maximum number of marks:

- Group 1 – Work Safely
- Group 2 – Demonstrating Technical Knowledge
- Group 3 – Industry Standards, Legislation, Processes and Procedures
- Group 4 – Demonstrating Technical Skills
- Group 5 – Customer Service/Working with others
- Group 6 – Behaviours

A minimum score must be achieved in each group to achieve a Pass. A maximum of 50 marks are available. For further details see Step-by-Step Guide below.

Stage 4: Interview based on the Work Log – The interview will typically last one hour and will also take place with the assessor where currency of knowledge will be checked by verbal questioning around reasons for choices, methods, material, risk, health and safety. A maximum of 20 marks are available. For further details see below.

The Competency Test (practical assessment), Work Log Review and Interview based on the Work Log each have a minimum mark that must be achieved in order to pass the end-point assessment. For further details see Step-by-Step Guide below.

Step-by-Step Guide

The table below provides a step-by-step guide on how the four elements of the portfolio assessment will be carried out:

Stage 1	Gas Safe® registration
Assessors	You will be assessed by: 1 independent or employer assessor, appointed by Energy & Environment Awards. The same independent/employer assessor may carry out all assessments.
Gas Safe Structure	You must have Gas Safe® registration for a minimum of four appliances (before Gateway). The Gas Safe® registration certificate must be included in your portfolio as part of the portfolio assessment. You cannot achieve an overall pass grade without Gas Safe® registration for a minimum of four appliances. **Marks allocated**: 10 marks towards the Portfolio score
Who delivers, registers and assesses Gas Safe® for a minimum of four appliances?	**NOT delivered or assessed by Energy & Environment Awards.** **Your employer/training provider will be responsible for making all the arrangements with you.**

Stage 1	Gas Safe® registration
What are the tasks or topics that will be covered?	You must legally achieve Gas Safe® registration for the setting specialism in each appliance in which they are demonstrating competence in either Natural Gas or Liquid Petroleum gas (LPG), see Appendix F in GEO Supporting Documents for the 'Four Appliance Categories – Amplification and Guidance.'

Stage 2	Competency Test (Practical Assessment)
Assessors	You will be assessed by: 1 independent or employer assessor, appointed by Energy & Environment Awards. The same independent/employer assessor may carry out all assessments.
Competency Test structure	Typically takes half a day to enable the assessment of four appliances in different realistic working environments . **Questioning:** will take place during the competency test and will focus on underpinning knowledge and/or skills and behaviours where an opportunity to observe them has not occurred. There will also be some questions on Unsafe Situations at the end of the competency test. There may be breaks during the competency test to allow you to move from one location to another and for meal/comfort breaks. Where breaks occur, the clock will be paused. The assessment time is not reduced. **The competency test will be:** • completed in the last three months after the achievement of Gas Safe ® registration

Stage 2	Competency Test (Practical Assessment)

	• a demonstration of core and specific skills, knowledge and behaviours in a 'real world (realistic working)' environment to an employer/independent assessor
	• typically assessed on a range that could include:
	  ○ the safe gas and electrical installation
	  ○ commissioning
	  ○ decommissioning and/or ongoing service and repair
	• on a minimum of four appliances. Appliances can include but are not limited to, a range of work categories such as:
	  ○ central heating boilers
	  ○ unvented hot water storage
	  ○ ducted air heaters
	  ○ cookers
	  ○ space heaters
	  ○ meters
	  ○ boosters
	  ○ testing and purging of industrial pipework
	For example, you could be assigned a task to diagnose and rectify fault(s). See Appendix F in GEO Supporting Documents for the 'Four Appliance Categories – Amplification and Guidance.'
	Marks allocated towards the Portfolio score: 20
	Minimum marks for this element to achieve a pass: 16

Stage 2	Competency Test (Practical Assessment)
Where will the assessment take place?	Your assessments may take place both in the workplace (customer's home), or in a 'Realistic Work Environment (RWE)', (training centre).
What are the tasks or topics that will be covered?	Knowledge, skills and behaviours (KSBs) are covered in amplification and guidance in the GEO Specification.  **For amplification and guidance refer to the GEO Specification link on page 10.**
Who sets the task(s) for the competency test?	Your employer/training provider will set the task based on Energy & Environment Awards template provided within Supporting Documents. The task must provide you with the opportunity to achieve all the KSBs assessed in the competency test.
Will I be questioned during the competency test?	You will be asked questions during the competency test to confirm your understanding of the rationale for actions and choices you made during the test. Questions will also cover Unsafe Situations. The content of this competency test will relate to the four appliances for which the apprentice has received Gas Safe® certification.

Stage 3	Work Log Review
Assessors	You will be assessed by: 1 independent or employer assessor, appointed by Energy & Environment Awards. The same independent/employer assessor may carry out all assessments.

Stage 3	Work Log Review
Work log review structure	Your Work Log: • is marked by an independent assessor • can be referred to by you to illustrate your answers during the interview (as the interview will be based on your work log) • must only contain evidence mapped to the KSBs assessed in the interview and included in the mapping document – a sample Work Log Mapping Document is included in Appendix B **Marks allocated** towards the Portfolio score: 50 **Minimum marks** for this element to achieve a pass: 34
What are the tasks or topics that will be covered?	Knowledge, skills and behaviours (KSBs) are grouped in to six areas, each with a minimum and maximum number of marks. **For amplification and guidance refer to the GEO Specification link on page 10.**

Stage 4	Interview based on the Work Log
Assessors	You will be assessed by: 1 independent or employer assessor, appointed by Energy & Environment Awards. The same independent/employer assessor may carry out all assessments.
Interview assessment structure	 Typically, last 1 hour. **Number of questions**: 10 standardised questions will be asked. Some of which will be in two parts. **The Interview based on the Work Log will be:** • conducted by an employer/independent assessor • face to face or remote, as agreed • recorded in writing using an interview record template provided by Energy & Environment Awards • video recorded using relevant technology such as Microsoft Teams or an audio recording device • conducted under examination conditions You must have access to your work log throughout the interview. You will be given at least two weeks' notice of the interview. **Marks allocated** towards the Portfolio score: 20 **Minimum marks** for this element to achieve a pass:10

Stage 4	Interview based on the Work Log
Where will the assessments take place?	In a quiet room, free from distractions and influence.
What are the tasks or topics that will be covered?	Knowledge, skills and behaviours (KSBs) are covered in amplification and guidance in the GEO Specification  **For amplification and guidance refer to the GEO Specification link on page 10.**
Provisional Grading	The independent/employer assessor will award a provisional grade. You must pass **ALL** the pass criteria in order to achieve a pass.
Overall grading for this component	Fail, Pass or Distinction

Work Log of Evidence Requirements

The requirements are as follows:

Work Log Mapping Document

You must map your work log of evidence to the KSBs covered by the interview.

You must include a mapping document at the front of your work log that clearly references the location of the evidence in your work log.

For further guidance on how to map refer to:

- Section below 'How do I organise my work log of evidence and map it to the mapping document?'
- MOET Role Specific Specification Section 5: Guidance on work log of evidence and apprentice mapping
- Apprentice Guide: Appendix B for the work log mapping document

How do I organise my work log of evidence and map my evidence?

Step-by-Step Guide

You must include a work log mapping document and place it at the front of your work log, see table above for guidance and where to locate the work log mapping document.

Your work log is assessed. It serves two purposes:

- The independent/employer assessor reviews your work log before the interview to help focus and contextualise their questions
- You should carefully prepare, index and map your work log as this will further support you during your interview. Your organised work log will allow you with ease to refer to examples and discuss the evidence with the independent/employer assessor

What should I include in my work log?

Quality vs quantity

You should be supported in selecting and mapping evidence for your work log by your employer or training provider.

We would advise you to choose the best pieces of evidence and map them to each KSB which will be covered during your interview. To be confident of meeting the KSB, you should aim to have two/three pieces of evidence mapped to each KSB.

Examples of acceptable evidence:

- must contain a mapping document that is mapped against the relevant KSBs that will be assessed by the interview. A template has been produced which you can use to collect and map your evidence. A copy of the template is included, see Appendix B 'Work Log Mapping Document'
- **competency assessments** – safe isolation of operational equipment for maintenance is one example of this type of competency assessment, applicable to you in gas engineering
- **progress review documentation** - reviews which should be completed and recorded to determine progression towards competence across the entire occupational Standard
- workplace documentation/records, for example job task sheets/job card/times sheets, equipment maintenance /service records related to you
- witness statements signed and dated by coaches/trainers
- any employer contributions should focus only on direct observation of evidence (for example witness statements) rather than opinions
- annotated photographs/diagrams
- video clips (maximum total duration 10-minutes); the apprentices must be in a view and identifiable
- quality pieces selected

The above is not a definitive list. You can include other relevant evidence sources.

You **must not** include in your work log any methods of self-assessment.

Evidence must be:

- produced by you (authentic)
- relevant to the standard (K, S or B) that it is mapped to
- produced during the time you were carrying out your on-programme training

What can I do to prepare for the interview based on the work log?

You should:

- be familiar with the structure of your work log
- know the KSBs covered by the interview
- know where you have mapped your KSBs by referring to your work log mapping document
- ensure there is quality evidence to cover every KSB in the interview
- practise mapping evidence and completing the evidence mapping grid
- know how you will be graded

The role of your employer or training provider

Employers or training providers are expected to support you in preparing your work log by:

- clarifying responsibility for supporting you in selecting and mapping evidence for your work log, including the role of employer coaches/mentors where applicable
- advising you on which pieces of evidence you should select to ensure that when it is looked at as a whole, your evidence provides coverage of all the required elements of the standard (KSBs) assessed in the interview
- supporting the mapping of your evidence and production of your mapping document
- authenticating evidence you provide is valid
- signing off your work log
- submitting your work log to Energy & Environment Awards as part of Gateway

Practice Component 1: Portfolio Assessment

You should have an opportunity to have a practice competency test, work log review and an interview based on your work log which mirror the real assessments. A practice for each stage would be set up for you using the structure in the table above by your employer or training provider.

Component 2: Knowledge Assessment

Overview

The knowledge assessment is a multiple-choice test and is paper based. You will have 60 minutes to complete the test. The test consists of 40 questions.

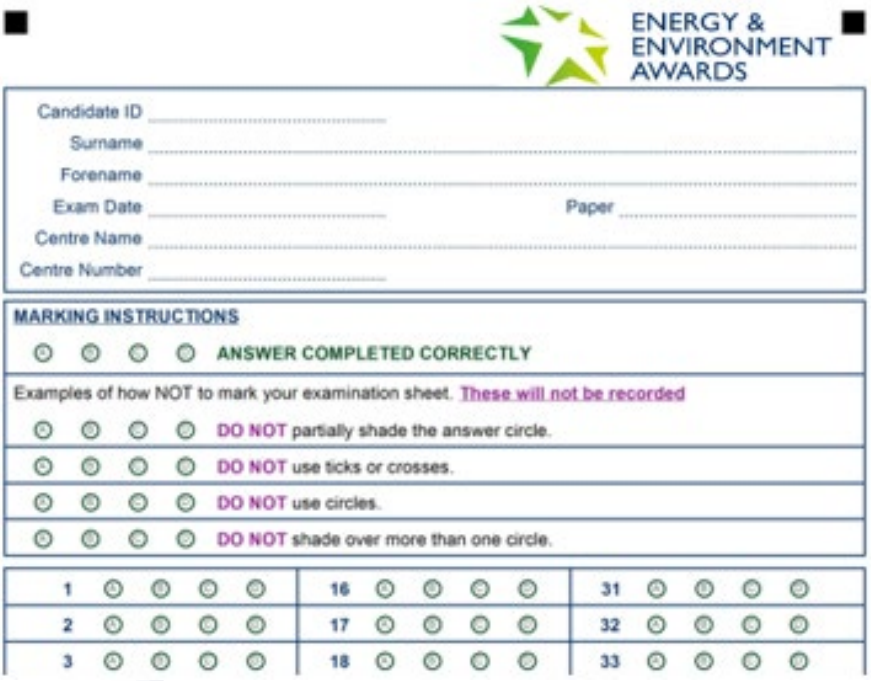
The multiple-choice questions will have four possible answers of which one will be correct.

Step-by-Step Guide

The table below provides a step-by-step guide on how the knowledge assessment (multiple-choice test) will be carried out:

<table>
<tr><td>Who will start and finish my knowledge assessment?</td><td>You will sit your knowledge assessment (multiple-choice test) in the presence of an invigilator.</td></tr>
<tr><td>How will the question appear?</td><td>Here is an example of how the question will appear:

<table>
<tr><th colspan="2">Question 1</th></tr>
<tr><td colspan="2">In a workplace, who is responsible for maintaining health and safety?</td></tr>
<tr><th colspan="2">Possible answers</th></tr>
<tr><td>a)</td><td>Employers</td></tr>
<tr><td>b)</td><td>Safety managers</td></tr>
<tr><td>c)</td><td>Most senior person on-site</td></tr>
<tr><td>d)</td><td>Everyone</td></tr>
</table>
</td></tr>
</table>

	 You must **select one answer** that you think is correct. You will be provided with an answer sheet where you will be expected to shade in the answer you have selected. Here is an example: **Always have a go even if you are not sure that it is the correct answer.**
Can I take any resources into the exam room?	The test is closed book which means that you cannot refer to any other materials. You will be provided with stationery on the day. You can take into the exam a scientific non-programmable calculator.
Can I have access to the internet?	No access to the internet is allowed and this means you must not take your SMART watch into the exam room.
How will the knowledge assessment be organised for me?	**Locations:** Your knowledge assessment (multiple-choice test) will take place at your employer's or training provider's premises or a suitable venue. • You will take the test in a quiet space and in the presence of an invigilator • Your test will be scheduled by your employer or training provider with Energy & Environment Awards **IMPORTANT NOTE:** If you fail the knowledge assessment multiple-choice test), you will **ONLY** be allowed **ONE RE-SIT** at your

<table>
<tr><td></td><td>employer's discretion. It is important to revise and ensure that you are confident with the knowledge you are being tested on.</td></tr>
<tr><td>What criteria will I have to learn?

AND

How many questions will be asked on each criteria?</td><td>The knowledge assessment (multiple-choice test) questions are knowledge based and sample the 4 core knowledge and 12 technical knowledge criteria. Below is a list of the knowledge criteria, assessed in the knowledge assessment along with the range of questions that will be allocated to a knowledge assessment paper:
<table>
<tr><th>Number of Questions</th><th>K – Core Knowledge
TK – Technical Knowledge</th></tr>
<tr><td>1 - 3</td><td>K1 Current Health, Safety and Environmental legislation and regulations applicable to work in the gas industry</td></tr>
<tr><td>1 - 4</td><td>K3 Gas and electrical theories and procedures involved in the practical installation, commissioning, decommissioning and/or ongoing service and repair of gas installations, appliances and associated equipment</td></tr>
<tr><td>1 - 4</td><td>K4 Relevant electrical/mechanical principles and how they are applied in work processes and procedures</td></tr>
<tr><td>1 - 4</td><td>K7 Current regulatory compliance, current Gas Safety (Installation and Use) Regulations and the current Electricity at Work Regulations</td></tr>
<tr><td>1 - 3</td><td>TK1 Electrical awareness and be able to carry out safe isolation and essential electrical safety checks</td></tr>
<tr><td>1 - 5</td><td>TK2 Combustion, combustion analysis, gas properties, carbon monoxide (CO), and types of burners</td></tr>
<tr><td>1 - 4</td><td>TK3 Flues and ventilation principles</td></tr>
<tr><td>1 - 3</td><td>TK4 The necessary safety checks following gas work on an appliance (regulation 26/9)</td></tr>
<tr><td>1 - 3</td><td>TK5 The range and suitability of appliances</td></tr>
<tr><td>1 - 4</td><td>TK6 The statutory and normative documentation including building regulations, water regulations and electrical regulations</td></tr>
</table></td></tr>
</table>

	1 - 4	**TK7** Emergency procedures, including gas escapes, report of fumes and for unsafe situations
	1 - 4	**TK8** A knowledge and understanding of four appliances
	1 - 5	**TK9** System design, location, controls, flue types for appliances and smart controls
	1 - 2	**TK10** An awareness of green technologies
	1 - 2	**TK11** The properties of Liquid Petroleum Gas (LPG)
	1 - 2	**TK12** An awareness of fuel storage – tanks and bottles (Liquid Petroleum Gas - LPG)
	 **Remember** the questions have been written to reflect the gas engineering operative role as a whole and are not focussed on specific plant, machinery, or employer-specific processes. For amplification and guidance refer to Section 2 of the GEO Specification.	
What should I do to prepare for the knowledge assessment?	**You should be prepared to**: • revise the knowledge criteria listed above • ask your employer or training provider for additional questions that they have prepared to support you • attend the knowledge assessment which will last 60 minutes  While on-programme, the employer or training provider must ensure you are: • familiar with all areas assessed by the knowledge assessment as listed above • supported in completing a practice test and provide you with constructive feedback to enable you to identify areas you need to carry out further revision in	

Practice Component 2: Knowledge assessment

You should have an opportunity to have a practice knowledge assessment which mirrors the real assessment. The practice knowledge assessment would be set up using the structure in the table above by your employer or training provider. The feedback provided will assist you with preparing for the actual knowledge assessment.

Knowledge, Skills and Behaviours (KSBs) coverage, by each assessment component

The portfolio assessment covers four stages as outlined below:

Stage 1: Gas Safe® registration for a minimum of four appliances – **NOT Assessed by Energy & Environment Awards**

Stage 2: Competency Test (practical assessment) – Assessed by Energy & Environment Awards as part of the portfolio

Stage 3: Work Log Review (typically developed during the apprenticeship)- Assessed by Energy & Environment Awards as part of the portfolio. See Appendix I in GEO Supporting Documents for the 'Work Log Mapping Document.'

Stage 4: Interview based on the Work Log – Assessed by Energy & Environment Awards as part of the portfolio.

Key to identify the assessment component in the table below:

KT – Knowledge Test

CT – Competency Test

WL – Work Log

What knowledge, skills and behaviours (KSBs) do I have to demonstrate during my portfolio assessment and knowledge assessment?	**For amplification and guidance refer to the GEO Specification link on page 10.**	
	Key	**Core Knowledge**
	KT WL	**K1** Current Health, Safety and Environmental legislation and regulations applicable to work in the gas industry
	CT WL	**K2** Safe gas and electrical installation, commissioning, decommissioning and or ongoing service and repair procedures of gas installations and appliances needed to establish

		the safe operation of the equipment and installation in accordance with industry standards
	KT WL	**K3** Gas and electrical theories and procedures involved in the practical installation, commissioning, decommissioning and/or ongoing service and repair of gas installations, appliances and associated equipment
	KT WL	**K4** Relevant electrical/mechanical principles and how they are applied in work processes and procedures
	CT WL	**K5** Up to date energy efficiency advice and guidance to be given to the customer
	CT WL	**K6** Product knowledge to be able to discuss and advise the customer
	KT WL	**K7** Current regulatory compliance, current Gas Safety (Installation and Use) Regulations and the current Electricity at Work Regulations
	CT WL	**K8** Company rules, policies and procedures as defined by the employer
	Key	**Technical Knowledge**
	KT WL	**TK1** Electrical awareness and be able to carry out safe isolation and essential electrical safety checks
	KT WL	**TK2** Combustion, combustion analysis, gas properties, carbon monoxide (CO), and types of burners
	KT WL	**TK3** Flues and ventilation principles
	KT WL	**TK4** The necessary safety checks following gas work on an appliance (regulation 26/9)

	WL KT	**TK5** The range and suitability of appliances
	WL KT	**TK6** The statutory and normative documentation including building regulations, water regulations and electrical regulation
	KT WL	**TK8** A knowledge and understanding of appliances
	KT WL	**TK9** System design, location, controls, flue types for appliances and smart controls
	KT WL	**TK10** An awareness of green technologies
	KT WL	**TK11** The properties of Liquid Petroleum Gas (LPG)
	KT WT	**TK12** An awareness of fuel storage – tanks and bottles (Liquid Petroleum Gas - LPG)
	Key	**Core Skills**
	CT WL	**S1** Undertake and document rigorous risk assessments to ensure the safety of all affected by the work activities
	CT WL	**S2** Take personal responsibility for maintaining safety standards and achieving job objectives
	WL	**S3** Use and maintain tools, equipment and personal protective equipment (PPE) in a safe and appropriate manner
	CT WL	**S4** Safe gas and electrical installation, commissioning, decommissioning and/or ongoing service and repair of gas installations and appliances needed to establish the safe operation of the equipment and installation accordance with industry standards

	CT WL	**S5** Work with focus and clear purpose in all conditions and locations, covering business requirements, including lone working and safely adapt working methods to reflect changes in working environments
	CT WL	**S6** Work on customer premises/property showing appropriate care and respect whilst focusing on safety
	CT WL	**S7** Use a variety of appropriate and effective communication methods to interact with customers and others to give/receive information accurately, in a timely and positive manner in order to deliver the best possible service
	CT WL	**S8** Identify where situations or conditions are to unsafe standards and take appropriate actions within your range of competency
	WL	**S9** Achieve individual and team tasks which align to overall work objectives, be self-motivated and disciplined in the approach to work activities
	WL	**S10** Work effectively and efficiently with people from different trades/disciplines, backgrounds and expertise to accomplish an activity in a safe manner, on time, to meet customer expectations
	CT WL **CT WL**	**S11** Identify, organise and use resources effectively and sustainably to complete the task with consideration to cost, quality, safety, security and environmental impact **S12** Be able to read and follow technical documentation associated with equipment and installation requirements
	Key	**Technical Skills**
	CT WL	**TS1** Carry out safe isolation essential electrical safety checks
	CT WL	**TS2** Demonstrate ambient air testing/carbon monoxide/dioxide atmosphere testing
	CT WL	**TS3** Carry out flue testing

	CT WL	**TS4** Undertake the necessary safety checks following gas work on an appliance (regulation 26/9)
	CT WL	**TS5** Identify faults and take the appropriate action
	CT WL	**TS6** Identify gas safety controls and prove their safe operation
	CT WL	**TS7** Undertake the installation and/or repair and maintenance of appliances
	CT WL	**TS8** Complete records and maintain records accordingly
	CT WL	**TS9** Reinstate following completion of works cleaning up and making good
	CT WL	**TS10** Work in compliance with statutory and normative documentation including building regulations, water regulations and electrical regulations
	CT WL	**TS11** Access and comply with technical guidance, bulletins and safety alerts e.g., Gas Industry Unsafe Situations Procedures (GIUSP)
	CT WL	**TS12** Demonstrate tightness testing, purging and relight procedures on gas installations
	CT WL	**TS13** Demonstrate pipework installations/pipework skills, pressure and flow/pipework sizing, meter installations
	Key	**Core Behaviours**
	CT WL	**B1** Ensure personal wellbeing and the safety of customers and others is a priority

	CT WL	**B2** Be risk aware showing the desire to reduce risks through systematic monitoring and checking information and the strict compliance with appropriate regulations and normative documents
	CT WL	**B3** Demonstrate an awareness of how the work impacts on others in the work environment
	CT WL	**B4** Confidently deliver a polite, courteous, professional service to all customers and members of the public whilst safeguarding customer welfare and recognising vulnerability, equality and diversity
	CT WL	**B5** Undertake Continuous Professional Development to enhance knowledge and skills to maintain competence
	CT WL	**B6** Recognise personal and professional limitations and seek appropriate advice when necessary
	CT WL	**B7** Display self-discipline and self-motivated approach
	CT WL	**B8** Exercise responsibilities in an ethical manner

Overall grading

Your apprenticeship will be graded distinction, pass or fail. The final grade will be determined by collective performance in the two assessment components. A points system will determine if you have achieved a distinction, pass or fail and is described below:

- You will achieve a distinction overall if you achieve a distinction in both the portfolio and knowledge assessment
- You will achieve a pass overall if you achieve a pass in both the portfolio and knowledge assessment
- You will fail overall if you achieve a fail in either the portfolio or knowledge assessment

Portfolio Assessment %	Grade	Knowledge Assessment %	Grade
85 - 100	Distinction	90 - 100	Distinction
70 - 84	Pass	80 - 89	Pass
<69	Fail	<79	Fail

Section 4: Resits and retakes

If you fail one or more EPA components you can re-sit or a re-take the failed component at your employer's discretion. Your employer needs to agree that a re-sit or re-take is appropriate. A re-sit does not need further learning, but a re-take does. You should have a supportive action plan to prepare for your re-sit or re-take.

IMPORTANT NOTE: If you do not achieve a pass in the knowledge assessment, you will **ONLY** be allowed **ONE RE-SIT**.

Overall grading

Your overall apprenticeship grade is determined by your performance across both the portfolio assessment and the knowledge assessment, in line with the grading rules explained in the Overall Grading section of this guide. To achieve a pass or distinction, you must demonstrate the required level of performance in both assessment components.

Energy & Environment Awards resit and re-take policy can be found at: https://energyenvironmentawards.co.uk/policies-and-fees/

Section 5: Appendices

Appendix A: Glossary

Appendix B: Work log Mapping Document

Appendix A: Glossary

Amplification – provides more detail on how individual knowledge, skills or behaviours statements should be interpreted. Where the KSB statements, themselves are deemed self-explanatory, no amplification is provided. Assessment may include questions on anything identified in the amplification

Behaviours –mindsets, attitudes or approaches needed for competence. Whilst these can be innate or instinctive, they can also be learnt. Behaviours tend to be very transferable. They may be more similar across occupations than knowledge and skills. For example, team worker, adaptable and professional

Elements – are the knowledge, skills and behaviours and what is needed to competently undertake the duties required for an occupational standard

Guidance – is only provided where it is required to support interpretation of the KSB statements

Gateway – the stage of the apprenticeship where the apprentice, employer and trainer determine whether the apprentice is ready to undertake the End-Point Assessment

Independent Assessor – Will holistically assess the knowledge, skills and behaviours (KSBs) that you have been learnt throughout the apprenticeship. Their role as an Independent Assessor would involve assessing components 1 (portfolio assessment) and 2 (knowledge assessment)

Knowledge – the information, technical detail, and 'know-how' that someone needs to have and understand to successfully carry out the duties. Some knowledge will be occupation-specific, whereas some may be more generic

Options / Pathways – a specialist route within an occupational standard that builds on the occupational competence for a new entrant to the occupation

Skills – the practical application of knowledge needed to successfully undertake the duties. They are learnt through on and/or off-the-job training or experience

Standard – An occupational standard is a description of an occupation. It contains occupational profile, and describes KSBs needed for someone to be competent in the occupation's duties. The occupational standards are developed by employers for occupations that meet the Institute for Apprenticeships & Technical Education current criteria. For further details refer to: https://skillsengland.education.gov.uk/apprenticeship-standards/st0155-v1-1

Topic - is a collection of elements grouped into a theme e.g., Health and Safety

Appendix B: Work log Mapping Document

Introduction

Throughout the on-programme part of the apprenticeship, you will need to compile a work log of evidence to support the requirements of the technical interview. The evidence within the work log will need to be mapped by you to the KSB requirements using the mapping document below.

The independent/employer assessor will use the mapping document to review the evidence in your work log in preparation for the technical interview. The independent/employer assessor will not assess your work log.

The work log mapping document below consists of the core requirements.

Your next steps

1. Complete all the details on the first page and include employer details of where relevant competencies from your experience at work was gained.

2 Ensure each piece of evidence is signed off by your tutor/supervisor/mentor and lead provider (employer or training provider). You can use a number of different types of evidence to demonstrate your competence as described in Section 5 of the Specification – 'What to include in the work log?'. For further guidance, you must seek advice from your tutor/supervisor/mentor and lead provider.

3 Map evidence to the criteria in the following pages using a referencing system indicating where the evidence for the criteria is located in your work log e.g., work based evidence Job 1 (J1) page 5 paragraph 2. This will allow the independent assessor to locate the section or specific piece of evidence being discussed with you during the technical interview.

4 Place the work log mapping document at the front of the work log of evidence.

5 Your lead provider must make arrangements for Energy & Environment Awards to have access to your work log including the work log mapping document at Gateway.

Work Log Mapping Document

Mapping Sign off on Work Log Completion:

Place this work log mapping document at the front of your work log of evidence.

Apprentice Full Name (Print)	Apprentice Signature	Training Provider (Company)	Training Provider Signatory	Date of Sign Off

Please Note:

Pass: each criteria must be met to achieve a pass

Fail: if you do not demonstrate the pass criteria

The knowledge, skills and behaviours are grouped in six areas, each with a maximum number of marks available which are shown below:

Knowledge, Skills and Behaviours – Six areas	
Group 1	Work Safely (10)
Group 2	Demonstrating Technical Knowledge (10)
Group 3	Industry Standards, Legislation, Processes and Procedures (6)
Group 4	Demonstrating Technical Skills (12)
Group 5	Customer Service / Working with others (6)
Group 6	Behaviours (6)

The table below provides the standard that is to be met by you and there are three columns for the work log review. The assessor may find that 1 piece of quality evidence covers the K/S/B in this case the assessor would write down the evidence reviewed in column 1. If more than one piece of evidence had to be reviewed for the K/S/B the assessor will state, the additional pieces of evidence reviewed in column 2 and/or 3.

There are 6 areas and, in each area, a minimum score of 1 mark for each standard can be achieved, and 2 marks where quality exceeds the minimum requirement to a maximum score of 10.

Group 1: Work Safely

Ref.	Apprenticeship Standard Criteria	WORK LOG EVIDENCE Reference (Apprentice input)		
		1	2	3
S1	Undertake and document rigorous risk assessments to ensure the safety of all affected by the work activities			
S2	Take personal responsibility for maintaining safety standards and achieving job objectives			
S3	Use and maintain tools, equipment, and personal protective equipment (PPE) in a safe and appropriate manner			
S5	Work with focus and clear purpose in all conditions and locations, covering business requirements, including lone working and safely adapt working methods to reflect changes in working environments			
S6	Work on customer premises/property showing appropriate care and respect whilst focusing on safety			
Assessor Comments:				

Group 2: Demonstrating Technical Knowledge

Ref.	Apprenticeship Standard Criteria	WORK LOG EVIDENCE Reference (Apprentice input)		
		1	2	3
K2; S4	Safe gas and electrical installation, commissioning, decommissioning and/or ongoing service and repair procedures of gas installations and appliances needed to establish the safe operation of the equipment and installation in accordance with industry standards			
K3	Gas and electrical theories and procedures involved in the practical installation, commissioning, decommissioning and/or ongoing service and repair of gas installations, appliances, and associated equipment			
TK1	Electrical awareness and be able to carry out safe isolation and essential electrical safety checks			
TK6	The statutory and normative documentation including building regulations, water regulations and electrical regulations			
TK7	Emergency procedures, including gas escapes, report of fumes and for unsafe situations			
Assessor Comments:				

Group 3: Industry standards, Legislation, Processes and Procedures

Ref.	Apprenticeship Standard Criteria	WORK LOG EVIDENCE Reference (Apprentice input)		
		1	2	3
S8	Identify where situations or conditions are to unsafe standards and take appropriate actions within your range of competency			
S12	Be able to read and follow technical documentation associated with equipment and installation requirements			
TS11	Access and comply with technical guidance, bulletins, and safety alerts e.g., Gas Industry Unsafe Situations Procedures (GIUSP)			
TS8	Complete and maintain records accordingly			
Assessor Comments:				

Group 4: Demonstrating Technical Skills

Ref.	Apprenticeship Standard Criteria	WORK LOG EVIDENCE Reference (Apprentice input)		
		1	2	3
K4	Application of relevant electrical/mechanical principles and how they are applied in work processes and procedures			
TS1	Carry out safe isolation essential electrical safety checks			
TS2; TS3	Demonstrate ambient air testing/carbon monoxide/dioxide atmosphere testing, flue-flow and spillage testing			
TS4	Undertake and record the details of the necessary safety checks following gas work on an appliance (Reg. 26/9)			
TS5	Identify faults and take the appropriate action to rectify			
TS6; TS7	Undertake the installation and commissioning of appliances, including identification of gas safety controls and prove their safe operation			
TS7	Undertake the maintenance AND repair of appliances/systems			
TS9	Reinstate following completion of works cleaning up and making good			
TS12	Demonstrate tightness testing, purging and relight procedures on gas installations			
TS13	Demonstrate pipework installations/pipework skills, pressure and flow/pipework sizing, meter installation			
Assessor Comments:				

Group 5: Customer Service/Working with others

Ref.	Apprenticeship Standard Criteria	WORK LOG EVIDENCE Reference (Apprentice input)		
		1	2	3
K5	Up to date energy efficiency advice and guidance to be given to the customer			
K6	Product knowledge to be able to discuss and advise the customer			
S7	Use a variety of appropriate and effective communication methods to interact with customers and others to give/receive information accurately, in a timely and positive manner in order to deliver the best possible service			
S9	Achieve individual and team tasks which align to overall work objectives, be self-motivated and disciplined in the approach to work activities			
S10	Work effectively and efficiently with people from different trades/disciplines, backgrounds and expertise to accomplish an activity in a safe manner, on time, to meet customer expectations			
S11	Identify, organise, and use resources effectively and sustainably to complete the task with consideration to cost, quality, safety, security, and environmental impact			
Assessor Comments:				

Group 6: Behaviours

Ref.	Apprenticeship Standard Criteria	WORK LOG EVIDENCE Reference (Apprentice input)		
		1	2	3
B1	Ensure personal wellbeing and the safety of customers and others is a priority			
B2	Be risk aware showing the desire to reduce risks through systematic monitoring and checking information and the strict compliance with appropriate regulations and normative documents			
B3	Demonstrate an awareness of how the work impacts on others in the work environment			
B4	Confidently deliver a polite, courteous, professional service to all customers and members of the public whilst safeguarding customer welfare and recognising vulnerability, equality, and diversity			
B5	Undertake Continuous Professional Development to enhance knowledge and skills to maintain competence			
B6	Recognise personal and professional limitations and seek appropriate advice when necessary			
B7	Display self-discipline and self-motivated approach			
B8	Exercise responsibilities in an ethical manner			
Assessor Comments:				