



Level 4 Ordnance Munitions and Explosives Technician

Knowledge Test Guide

For Training Providers



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ASSESSMENT OVERVIEW

As part of End-Point Assessment (EPA) the apprentice will be required to complete a knowledge test in which they will be asked 40 closed response (multiple choice) questions. Of those 40 questions, 10 will be based on two short scenarios. The test samples knowledge criteria from all areas mapped to this assessment in the apprenticeship assessment plan¹. It is a robust method to determine the full breadth of the apprentice's knowledge and complements the other methods as it tests aspects that cannot be tested elsewhere. The apprentice will be required to answer all of the questions.

This guide document provides the administrative instructions for the conduct of the assessment. The information provided in this document is the same information given to ELS assessors. Therefore, it will be useful to you when helping the apprentice prepare for their Knowledge Test exam. You could also use this information to conduct a mock assessment with the apprentice. The exam may be conducted in one of three ways; online, paper-based or offline as agreed during discussion between the apprentice and the IEPA during their formation of the individual assessment plan.

KNOWLEDGE SKILLS AND BEHAVIOUR CRITERIA

KSB Reference No.	Statement
KNOWLEDGE	
K4	The basic concepts and theory of OME engineering/material science, including the chemical properties of explosives, abnormal stimulus, compatibility testing, hazard testing, risk assessment and engineering controls.
K9	The principles underpinning OME concepts and components for a given explosive effect including knowledge of initiators, initiation systems, explosive trains, explosive substances and articles.

K11	The principles of explosives classification, OME inventory activities and licensing requirements, conditions and restrictions.
K12	The principles related to the safe preparation of ordnance munitions and explosives for specified tasks.
K15	The requirements of a Quality Management System and the key activities required by this (such as inspection and QA regimes) throughout the OME lifecycle.

ASSESSMENT CONDUCT

Apprentices must take the test in a suitably controlled environment that is a quiet space, free of distractions and influence, in the presence of an invigilator arranged by the EPAO. The invigilator may be the independent assessor, or another external person employed by the EPAO or specialised (proctor) software, if the test can be taken on-line.

The apprentice is to be given 90 minutes to complete the test.

The test is closed book, which means that the apprentice cannot refer to reference books or materials.

ONLINE

At the start of the assessment process each apprentice will be assigned a login and password to gain access to the online examination platform, Moodle. Once they have their login, Apprentices will be able to access Moodle and are encouraged to read through the pre-test information provided for them.

Apprentices will not be able to access the test itself until the agreed time and date of their examination.

The test will take place in a suitably controlled environment that is; a quiet space, free of distractions and influence, and in the presence of an Invigilator. The Invigilator may also be your Independent Assessor.

Information on Invigilation and the conduct of exams is in line with the ELS EPA Remote Invigilation Policy, which will be available for the Apprentices to read in the pre-test notes section on Moodle (once they have their login).

On the day of the Knowledge Test, the Assessor/Invigilator will check the Apprentice's name and request to see an approved form of identification prior to the test starting. The following forms of identification have been approved:

- passport
- photographic driving licence
- national ID card

PAPER BASED

Apprentices can sit the test in a face to face classroom environment. This is to be invigilated in accordance with the ELS policy at the link above. You will not need to print exam papers as the ELS LMS allows printing of paper exams. This will be done by the ELS course support facilitator but you should confirm in advance that this has been organised.

OFFLINE

The test may be conducted offline on a tablet or laptop PC. In some circumstances it may be arranged for an apprentice to use a tablet supplied by ELS for mutual convenience based on the facilities available on the agreed test date. The apprentice will be able to log in to the ELS LMS using their password and upload the test to their device. The test will have to be invigilated in the same way as a paper-based test but has the advantage of the results being uploaded to the LMS via the cloud once connectivity is established.

QUESTION SELECTION

The ELS LMS contains a bank of over 100 knowledge and skills questions and 6 scenarios. When each knowledge and skills test is generated, the LMS randomly selects questions from the question bank to create the online knowledge and skills test or knowledge and skills test paper.

ADMINISTRATION

In order to ensure smooth conduct of the test the assessor will check the following points of administration:

- confirm the availability of the venue with ELS administration staff (if face to face conduct required)
- apprentices have all received an ELS welcome email with test date and time
- Moodle login and password details have been received and checked to ensure they work
- apprentice learner ID has been checked
- any language or differentiation issues have been catered for

GRADING DESCRIPTORS

Each correct answer will be assigned 1 mark. The final grade is determined by the number of correct answers. The learner will be awarded a grade based on their performance, as explained in the grading table below.

Grade	Minimum Score	Maximum Score
Distinction	32	40
Pass	20	31
Fail	0	19

MARKING

The knowledge and skills test will be marked automatically by Moodle if taken online. The results will be available to the apprentice upon completion of the test.

If the knowledge and skills test is taken on paper, the assessor will mark the paper and inform the apprentice of their results.

RESITS AND RETAKES

Apprentices who fail the assessment method will have the opportunity to take a re-sit or a re-take. A re-sit does not require further learning, whereas a re-take does.

Apprentices should have a supportive action plan to prepare for the re-sit or a re-take. The apprentice's employer will need to agree that either a re-sit or re-take is an appropriate course of action and arrangements for that must then be made at mutual convenience.

Apprentices who fail an assessment method and therefore the EPA in the first instance, will be required to re-sit or re-take any failed assessment methods only.

Re-sits and re-takes are not offered to apprentices wishing to move from pass to distinction.

OVERALL GRADE

Weighting

All assessment methods are weighted equally in their contribution to the overall EPA grade.

Confirming the Overall Grade

All EPA methods must be passed for the EPA to be passed overall.

To achieve a pass, the apprentice must achieve a pass in all three assessment methods by achieving all pass criteria.

To achieve a distinction, the apprentice must achieve a distinction in all three assessment methods by achieving all pass criteria and all distinction criteria.

Grades from individual assessment methods should be combined in the following way to determine the overall grade of the apprentice's EPA:

1 – Practical Demonstration	2 – Interview	3 – Knowledge Test	Overall Grade
Fail	Fail	Fail	Fail
Pass	Fail	Fail	Fail
Fail	Fail	Pass	Fail
Fail	Pass	Fail	Fail
Pass	Pass	Pass	Pass
Distinction	Pass	Pass	Pass
Pass	Distinction	Pass	Pass
Pass	Pass	Distinction	Pass
Distinction	Distinction	Pass	Pass
Pass	Distinction	Distinction	Pass
Distinction	Pass	Distinction	Pass
Distinction	Distinction	Distinction	Distinction

ELS have a resit/retake policy for any apprentices that fail to meet the criteria during their assessments.



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