



Key skills test

Information and communication technology

Level 1

Test specification

Introduction

- 1 The information and communication technology (ICT) key skill qualification will be awarded to candidates who are able to demonstrate that their attainment meets national standards in ICT in both their portfolio of evidence and an external assessment (hereafter referred to as a test).
- 2 The test provides the external assessment component for each key skill at each level. The test is externally set and marked. The purpose of the test is to assess the candidate's knowledge of the standard applications of ICT and the associated techniques.
- 3 For key skills, performance in the test is used to complement and support performance in the internal assessment component, the portfolio of evidence. The portfolio must contain evidence of the candidate's purposeful and effective use of ICT, which meets the full requirements of part B of the key skill standards. The portfolio evidence is internally assessed and externally moderated/verified. A candidate must satisfy the requirements of both components to be awarded the key skill.
- 4 The purpose of this test specification is to inform the development of tests for the ICT key skill at level 1 by clarifying those aspects of the standards which may be tested.
- 5 This specification is intended to provide writers, editors and reviewers, and also teachers and candidates, with detailed information about the acceptable content, coverage and demand for questions, together with the range of suitable contexts for questions at level 1.
- 6 This test specification is also intended to support the development of tests and items which may be re-used, as required.
- 7 This test specification should be read in conjunction with:
 - *Level 1 information and communication technology key skills standards* (QCA, CCEA, ACCAC, 2004)
 - *Guidance on the key skills* (QCA, CCEA, ACCAC, 2004).
- 8 This test specification has been designed to support the development and production of tests in English, Welsh and Gaeilge.

Design of tests

Principles

- 9 In creating tests, writers must take the following into account:
 - the test will last for 1 hour
 - the test will consist of 40 multiple-choice questions, each worth 1 mark
 - candidates will be supervised while taking the test.
- 10 The test specification is complemented by awarding body instructions to centres on the conduct of tests and guidance on arrangements for candidates with special requirements.

Scope and demand of tests

- 11 The test must match the identified requirements of the ICT standards at level 1. This means that the test will focus on specific aspects of part A of the key skill standards, 'You need to know how to', as well as drawing on some aspects of part B, 'You must'. For the purpose of this test specification, the requirements are organised into skill areas. Guidance on the range of skills covered by each of the skill areas is given in the appendix.
- 12 The ICT key skill standards have been aligned with the national curriculum order for ICT in England, which corresponds closely with the equivalent requirements in Wales and Northern Ireland. At level 1 this means that information on expectations may be drawn from the National Curriculum level descriptions for levels 4 and 5, and the key stage 4 programmes of study.

Pass mark

- 13 The test will be designed to have a predetermined pass mark in the range of 28–30 out of 40. Responsibility for setting the final pass mark for each paper resides with the awarding bodies acting jointly.

Form of questions

- 14 The test consists of multiple-choice questions. The terms and phrases used to describe the possible demands of questions are based upon this form of test. The use of multiple-choice questions necessarily restricts the test to those aspects of the key skill standards that are suitable for testing in this way. Skills, such as making judgements about the quality of information and decisions about when and how to apply ICT to good effect are assessed more effectively by means of the portfolio, which must provide evidence covering part B of the standards.
- 15 Each question is in multiple-choice form with four potential answers, of which one is correct (the key) and three are wrong (the distractors). Each distractor must be plausible but incorrect in some significant respect, which is evident to a candidate appropriately prepared for the test. The requirement of each question must be clear and unambiguous.
- 16 Each question should encourage the candidate to reason correctly and work things out carefully. Questions should be designed to discourage guessing by ensuring that the four alternative answers offered are sufficiently plausible to ensure that candidates must undertake the necessary working in order to find or check the correct answer.
- 17 There will be no 'follow-through' between questions. Finding the correct answer to a question will not depend on having answered the previous question correctly.

- 18 All questions must avoid making demands on candidates beyond the scope of the ICT skills being assessed. In particular, all language used in the questions and source material should be simple and direct. Only information relevant to the questions should be included. Expectations of knowledge, or familiarity with, specialist contexts, concepts and terms beyond those associated with the ICT topics in this test specification must be avoided.

Structure of tests

- 19 Tests will be made up of groups of questions based on different scenarios. Each group will include questions from more than one skill area (see below). There may also be some free-standing questions, which may draw from any skill area.
- 20 All source material should immediately precede the group of questions that refer to it. Each piece of source material will have between four and six associated questions. There may also be some free-standing questions, which may draw from any skill area.

Context

- 21 The ICT key skill is concerned with finding information, deciding what is relevant, bringing together and developing information, and presenting information, to meet a given purpose. Examples of scenarios which provide opportunities to develop suitable questions, involve finding, developing and presenting information about:
- travel, for example journeys by car or public transport, holidays away from home
 - leisure activities, for example hobbies, sports, clubs, TV, cinema, music, theatre
 - employment, for example job roles, organisations, pay rates, income
 - domestic activities, for example cooking, shopping, DIY
 - personal items, for example health, social security, social activities, address books
 - goods, for example food, clothing, toys, furniture, audio-video equipment, cars
 - climate and weather, for example rainfall, hours of sun, temperatures, forecasts
 - public records, for example library catalogues, electoral registers, census data, DVLA records
 - standard documents, for example invoices, order forms, bank statements.
- 22 Some candidates will be familiar with a particular context and others may not have this advantage. Some candidates may not have been on an overseas holiday; young candidates may have limited experience of financial documentation; older candidates may be less familiar with some sports or hobbies. This does not mean that such contexts should always be avoided but sufficient descriptions and/or images may be necessary to ensure that source material is understood by all concerned. A range of contexts will be used in each test to minimise potential disadvantage. In all source material it is essential to be brief, to use simple language and to avoid jargon.
- 23 Every effort must be made to ensure that source material is free of any form of bias (for example gender, ethnic, age) which might favour or disadvantage any candidate or group of candidates.

Skill areas and mark allocations

Mark allocations

| | | |
|--------------|-----------------------------------|-----------------|
| Skill area 1 | Find and select information | 6–10 marks |
| Skill area 2 | Enter and develop information | 11–15 marks |
| Skill area 3 | Layout and present information | 11–15 marks |
| Skill area 4 | Standard ways of working with ICT | 4–8 marks |
| Total | | 40 marks |

Skill area 1 – Find and select information

The skill area covers the following skills in part A and relates to ICT1.1 in part B.

- Find different types of information (for example text, images, numbers) from ICT sources (for example files, CD-ROMs, the internet) and non-ICT sources (for example written notes, price lists, diagrams).
- Decide what information is relevant for the purpose (for example answer questions from a customer, write report, help solve a problem, make something).

6–10 marks

Skill area 2 – Enter and develop information

The skill area covers the following skills in part A and relates to ICT1.2 in part B.

- Enter and bring in information (for example copy and paste text, import images) using formats that help development (for example tabs, tables, format of numbers).
- Develop information in the form of text, images and numbers (for example structure information, carry out calculations using suitable software, moving and resizing images).

11–15 marks

Skill area 3 – Layout and present information

The skill area covers the following skills in part A and relates to ICT1.3 in part B.

- Use appropriate layouts for presenting different types of information, including text, images and numbers (for example select page layouts for different types of document, such as letters or invoices).
- Present information in a consistent way (for example fonts, bulleted lists, alignment).
- Develop the presentation to meet the purpose (for example organise the presentation by moving, copying, deleting and inserting information).

11–15 marks

Skill area 4 – Standard ways of working with ICT

The skill area covers the following skills in part A and relates to ICT1.3 in part B.

- Ensure work is accurate and clear (for example ask others, proofread, use a spellchecker, highlight information to improve its clarity).
- Save information so it can be found easily (for example use suitable folders/directories, filenames).
- Identify health risks associated with working in ICT.
- Know how to send and receive email.

4–8 marks

Total: 40 Marks

Appendix

Guidance for writers, editors and reviewers on the key skills test information and communication technology level 1

The purpose of this appendix is to give guidance on the range of skills covered by each of the ICT key skill topic areas.

Skill area 1 – Find and select information

Sources of information

Candidates should know about the different methods and media used to provide information and should be able to recognise advantages or limitations for each. These methods and media include:

- paper-based newspapers, magazines, books (for example reference, encyclopaedia, educational, fiction), maps (for example road, world atlas), timetables (for example TV, train, bus, air, entertainment), brochures (for example holidays, products, services), financial statements (for example bank, insurance, bills), directories (for example telephone, yellow pages, companies)
- broadcast TV, radio
- teletext advertising (for example holidays, products, services), TV programme listings, news, weather forecasts, financial listings
- internet websites for products (for example cameras), services (for example holidays), reference information (for example museums)
- CD or DVD encyclopedias, manuals, brochures, directories, catalogues, clip art
- databases contacts, goods, DVLA, police, electoral roll, census, timetables
- email communication between individuals and groups, mailing lists
- people questionnaires, discussion, meetings.

1.1 Questions may, for example, require candidates to:

- a identify media suited to rapidly changing information (including newspapers, broadcast, teletext, databases, internet, email)
- b identify media unsuited to rapidly changing information (including books, CD-ROMs, DVDs)
- c identify constraints for media (including the need for equipment, specialised skills)
- d identify media that are convenient and portable (including newspapers, maps, books, mobile phones, mobile internet access).

Find different types of information

Candidates should know how to carry out search activities including manual (for example use of contents lists, telephone directories and indexes) and ICT-based (for example following links, using an internet search engine, finding occurrences of a particular word, using single-criterion searches). Questions will require an understanding of searches on both structured information (for example location in a table or ordered list) and unstructured information (for example matching a word in a document).

1.2 Questions may, for example, require candidates to:

- a identify methods of finding information suited to particular types of information source
- b identify suitable text searches for finding information (including matching a word in a document, the appropriate use of the wildcard (*), using a search engine)

- c identify techniques for moving between internet pages and websites using links or hotspots
- d identify text or numeric search criteria to locate information in a database (including use of the relational operators =, >, <).

Select information

Candidates should be able to interpret a variety of different forms of information and identify what is relevant for a specific purpose.

Scenarios or questions may, for example, present information in the form of:

- common paper-based products (for example timetables, calendars, diaries, invoices, bank statements, diagrams)
- results of surveys or questionnaires (for example voting statistics, census results, consumer reports)
- database records (for example contacts, goods, sports results, holiday offers, financial information)
- spreadsheets (for example sales figures, hours worked, rates of pay, prices of goods, budgets)
- information in graph or chart form (for example growth/time graph, temperature/month bar chart, transport preference pie chart).

1.3 Questions may, for example, require candidates to:

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- a identify a particular record, field or cell value in a table, database or spreadsheet
- b read charts and graphs to identify results (including pie and bar charts, line graphs)
- c identify possible travel plans or meetings suited to given timetables, calendars or diaries
- d identify specified information from a survey or questionnaire

Skill area 2 – Enter and develop information

Enter and bring together information using formats that help development

Candidates should know about different types of information that can be entered and stored in a computer and the techniques that can be used to bring together different types of information. They should also understand the importance of using appropriate and consistent formats to facilitate further development.

2.1 Questions may, for example, require candidates to:

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- a identify reasons for consistent use of spaces, tabs and returns
- b identify when and why tables might best be used
- c identify techniques for entering and bringing together information (including insert or copy and paste of text, tables, images, lines and boxes)

Develop information in the form of text, images and numbers

Candidates should be able to identify the different types of information they are dealing with and the best structures for further developing that information.

2.2 Questions may, for example, require candidates to:

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- a identify suitable methods of amending, inserting and deleting information (including copy and paste, cut and paste, move [drag and drop], find and replace, insert or delete fields, records, columns or rows)

- b identify why and how to insert, crop, size and position images
- c identify why and how to adjust table structures (including column width, row height, add rows, add columns)
- d identify techniques for ordering information (including sorting on single text or numeric field in ascending or descending order)
- e identify suitable field names and data types (including text, number, currency, date) to develop information in the form of records
- f identify suitable organisation of given information in a spreadsheet structure (including cells, rows, columns, headings)
- g identify suitable spreadsheet cell contents for developing given information (including text, number, currency, percentage, date)
- h identify suitable formulas including functions, to derive a required result, such as difference in weight, total expenditure, minimum cost. These may include the use of
 - cell references in spreadsheet formulas, for example =G11
 - cell ranges, for example C3:C7
 - a single arithmetic operator: +, -, *, /, for example =B7+C7, =A6*C10
 - functions including SUM, MIN and MAX, for example =SUM(C3:C7), =MIN(B6:F6)
- i identify the effects of changing specified values in a spreadsheet.

Skill area 3 – Layout and present information

Use appropriate layouts for presenting different types of information, including text, images and numbers

Presentation is concerned with the structure, format, impact and readability of information. Scenarios for questions may use examples of standard ways of presenting information including memos, letters, invoices, agendas, minutes and email.

Candidates should be aware of a variety of formatting techniques and should be able to identify the most appropriate for a given situation.

3.1 Questions may, for example, require candidates to:

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- a identify suitable page layout settings for printing given material (including margins, orientation [portrait, landscape], headers, footers, page numbering)
- b identify suitable paragraph layout settings for a document (including left, right, centred and fully justified text alignment, line spacing, tabs [left, right, centre], bullets and numbering)
- c identify text formats used in given examples (including regular, bold, italic and underlined font styles, changes in font size)
- d identify number formats used in given examples of database fields and spreadsheet cells (including currency, percentage, number of decimal places)
- e identify table format settings used in given examples (including row and column size, horizontal text alignment).

Present information in a consistent way

Candidates need to be able to recognise inconsistencies in writing and presentation style. They should be able to identify where page, paragraph text or number formatting is used inconsistently.

3.2 Questions may, for example, require candidates to:

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- a identify inconsistencies in a presentation (including unintended variations in headings, paragraph styles, bullets and numbering, tabs, line spacing, text fonts, font styles, font sizes).

Develop the presentation to meet the purpose

Candidates need to be able to identify how information should be organised in a presentation so that it meets the purpose. They should be aware of a variety of examples of standard documents, including formal letters, advertisements for jobs, goods or services, invitations to events, tables of results for sports activities, forms to collect information, mail order forms, invoices and statements.

3.3 Questions may, for example, require candidates to:

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Different
lettering

- a identify main features of the information in examples of standard documents (including sender's name and address, receiver's name and address, date)
- b identify ways to improve the organisation of information in examples of standard documents
- c identify suitable formats to present or summarise given information (including tables, bulleted lists, numbered lists, pie or bar charts).

Skill area 4 – Standard ways of working with ICT

Make sure work is accurate and clear Save information so it can be found easily

Candidates need to understand ways in which ICT can help with their work.

Candidates should be aware that information stored in a computer should be accurate, consistent and reliable, and that it should be stored securely.

There are many reasons for having standard ways of working with ICT. Candidates need to know that information in ICT systems can easily be lost or misused. They need to know:

- unauthorised people may gain access to confidential information
- people may copy original work and present it as their own
- files may be lost, corrupted by a virus or damaged in other ways
- computers or disks may be damaged so information stored in them cannot be recovered
- inaccurate or poorly written information may confuse or annoy readers
- information presented professionally may be believed, even though it may be inaccurate
- poorly laid-out workplaces may cause physical stress or be hazardous to ICT operators.

4.1 Questions may, for example, require candidates to:

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Different
lettering

- a identify techniques used to send and receive email
- b identify different types of inaccuracy (including mistakes in content and spelling)
- c identify ways of checking information for accuracy (including proofreading, spell checking, using print preview, asking others)
- d identify sensitive information (including health records, police records, pay records, bank statements, credit card statements) and ways of keeping it confidential (including physical security, passwords)
- e identify material that may be copyright
- f identify ways that information may be damaged (including viruses, vandalism, breakdown, accidental damage, theft) and how its loss may be minimised (including backup files, keeping original paper records)
- g identify types of human physical strain potentially related to using ICT systems, including Repetitive Strain Injury (RSI), eye strain and ways of reducing these problems (including equipment position, seating, lighting, taking breaks)
- h identify potential hazards in ICT workplaces (including power supplies, cable layout, position of equipment).