Guidance on the key skills units:

Communication, Application of number and Information Technology

LEVELS 1–3

▶ **Communication**

▶ **Application of number**

▶ **Information technology**

QCA

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Contents

Introduction to the key skills units

The purpose of this publication

There are six key skills units, at levels 1–4. At level 5, there is a single key skills unit in personal skills development. This booklet provides guidance on the interpretation of the key skills units in communication, application of number and information technology, at levels 1, 2 and 3. Separate guidance material is available on the higher levels (4 and 5) and the wider key skills of working with others, improving own learning and performance and problem solving, at levels 1–3 (see page 52).

This booklet is written primarily for assessors. The sections that follow offer an introduction to key skills, and amplification of key aspects of the units, to help achieve consistency in interpretation of the national standards. It does not provide detailed information about external assessment or the certification of key skills. This information can be obtained from awarding bodies that are approved to offer key skills.

Throughout the booklet, the term 'candidate' has been used to refer to anyone using the units. Please read this as 'student', 'trainee', 'employee' or 'individual' if more appropriate to the circumstances in which this guidance is being used.

The importance of key skills

Key skills are skills that are commonly needed for success in a range of activities in education and training, work and life in general. The key skills units aim to develop and recognise candidates' ability to apply these skills in ways that are appropriate to different contexts in order to improve the quality of learning and performance. They are intended for everyone, from pupils in school to chief executives in large companies.

Employers have taken a lead in promoting the importance of key skills for employability. Key skills are already an important feature of modern apprenticeships and other government-funded training programmes. Institutions of higher education are also making explicit use of key skills within their undergraduate and postgraduate programmes.

The development of key skills has been encouraged in schools and colleges for some time, particularly through GNVQs, work-experience programmes and curriculum-enrichment activities. Key skills are now highlighted in the national curriculum to show how they relate to subjects across the curriculum.

The Key Skills Qualification

From September 2000, all qualifications accredited by QCA and the other regulatory authorities in Wales and Northern Ireland, including GCE AS and A levels, will signpost opportunities for generating evidence and, where appropriate, for assessing key skills.

A key skills qualification is also available (from September 2000) that certificates the achievement of all three key skills units of communication, application of number and information technology, at levels 1–4. Candidates can achieve units at different levels, but must pass both an internal assessment and an external assessment to ensure the required standards have been met. The achievement of this qualification is recognised in the UCAS tariff for admissions to higher education.

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Understanding the key skills units

The key skills units are the outcome of extensive pilot work, evaluation and consultation during 1996–99. Their content also takes into account findings from research, carried out over the past ten years, relating to the development, assessment and recording of such skills in a variety of education, training, employment and community contexts.

The units set out what candidates need to know and what they must do to meet national standards of performance. They can be used in a number of ways, for example:

- to help candidates focus attention on what they are learning, how they are learning and how they can improve, so they can record their development in a progress file;
- to measure performance against national standards in working towards organisational objectives, and provide evidence to support claims;
- for assessment purposes alongside, or as part of, other qualifications.

The structure of the units

There is a unit for each of the key skills at each of the levels 1 to 4. At level 5 there is a single unit. Each unit addresses the candidate and has four parts:

1. a short overview of what the unit is about;
2. a description of what candidates need to know (Part A);
3. an outline of what candidates must do (Part B);
4. brief guidance on activities and examples of evidence (Part C).

An example of the level 2 communication unit is given on page 3.

Progression features

There are five levels of key skills. These levels correspond to the levels used for other qualifications within the national qualifications framework. For example, key skills level 2 can be broadly related, in terms of level of demand, to GCSE grades A*–C. However, it should not be assumed that candidates will automatically achieve key skills at the same level as their main programme. Key skills are certificated separately from other qualifications, so it is possible for candidates to achieve the individual key skills at different levels (ie at lower or higher levels, or at the same level as their main programme), depending on their abilities and circumstances.

Progression in key skills is related to three main strands. As candidates move up through levels 1–5, they are expected to:

- draw on more complex and a wider range of techniques in tackling activities;
- take increasing responsibility for deciding how they will apply their skills to suit different tasks, problems and situations;
- be more aware of factors that affect their performance when working within progressively more challenging contexts.

The main differences between the levels are highlighted in the charts for each key skill on pages 4 and 5.

Structure of the units

Introduction to the unit

This part of the unit provides a brief summary of what the unit is about and how it is structured.

Part A

This part of the unit describes what candidates need to know how to do, at the relevant level, in order to have the confidence to apply their skills appropriately. It can be used to assess candidates' prior learning, as well as their current capabilities, and to identify learning needs.

Part C

This part of the unit describes briefly some general activities that candidates might use to develop and demonstrate their skills.

It also provides examples of evidence that candidates could produce to show they have the skills required. Evidence can take a variety of written, oral, visual, physical and electronic forms.

Part B

This part of the unit tells candidates what they must do. The left-hand column describes, for each component of the unit, the type and amount of activity in which candidates should produce evidence of their ability to apply the relevant skills. For example, for the written communication component (C2.3), candidates must write two different types of documents about straightforward subjects, one of which should be an extended document and include at least one image.

The bullet points, in the boxes in the right-hand column, are the criteria for assessing the quality of candidates' performance, ie their ability to 'bring together' and apply their skills in a way that is appropriate to a particular activity. For example, candidates must show, in their portfolio, that *each* document presented as evidence of their writing skills meets all the assessment criteria in the box for that component (C2.3). The criteria must be used together, as a set, for each component of the unit.

Level 1 helps candidates to develop the basic skills that are important for key skills competence, and recognises their ability to apply these skills in meeting given purposes within routine situations.

Level 2 builds on level 1 by requiring candidates to extend their basic skills. It recognises their ability to take responsibility for some decisions about how they select and apply these skills to meet the demands of largely straightforward tasks.

This chart illustrates the main differences between the levels in each key skill
(Please refer to the key skills units for assessment purposes.)

Communication

LEVEL 1
Candidates must be able to:
- take part in discussions about straightforward subjects;
- read and identify the main points and ideas from documents about straightforward subjects;
- write about straightforward subjects.

LEVEL 2
Candidates must be able to:
- help move discussions forward;
- give a short talk using an image to illustrate their main points;
- read and summarise information from extended documents;
- use a suitable structure and style when writing extended documents.

Application of number

LEVEL 1
Candidates must be able to:
- interpret straightforward information;
- carry out calculations, using whole numbers, simple decimals, fractions and percentages to given levels of accuracy;
- interpret the results of their calculations and present findings, using a chart and diagram.

LEVEL 2
Candidates must be able to carry through a substantial activity that requires them to:
- select information and methods to get the results they need;
- carry out calculations involving two or more steps and numbers of any size, including use of formulae, and check their methods and levels of accuracy;
- select ways to present their findings, including use of a graph, describe methods and explain results.

Information technology

LEVEL 1
Candidates must be able to:
- find, enter, explore and develop relevant information;
- present information, including text, images and numbers, using appropriate layouts and save information.

LEVEL 2
Candidates must be able to:
- identify suitable sources, carry out effective searches and select relevant information;
- bring together, explore and develop information, and derive new information;
- present combined information, including text, images and numbers, in a consistent way.

Level 3 marks a shift from straightforward tasks to being capable of responding to the demands of more complex activities. Candidates need to demonstrate more explicit reasoning ability and personal responsibility in making decisions about how tasks are organised.

Level 4 requires candidates to have substantial autonomy and responsibility for managing activities and for identifying how the key skills relate to their situation. It recognises ability to develop a strategy for using key skills over an extended period of time, monitor and critically reflect on progress and adapt strategy, as necessary, to achieve the quality of outcomes required.

LEVEL 3

Candidates must be able to:

- create opportunities for others to contribute to group discussions about complex subjects;
- make a presentation using a range of techniques to engage the audience;
- read and synthesise information from extended documents about a complex subject;
- organise information coherently, selecting a form and style of writing appropriate to complex subject matter.

LEVEL 4

Candidates must be able to produce at least one extended example that requires them to:

- develop a strategy for using communication skills over an extended period of time;
- monitor progress and adapt their strategy, as necessary, to achieve the quality of outcomes required in work involving a group discussion and an extended written communication about complex subjects;
- evaluate their overall strategy and present outcomes from their work using a formal oral presentation, including images.

LEVEL 3

Candidates must be able to plan and carry through a substantial and complex activity that requires them to:

- plan their approach to obtaining and using information, choose appropriate methods for obtaining the results needed and justify their choice;
- carry out multi-stage calculations, including use of a large data set (over 50 items) and re-arrangement of formulae;
- justify their choice of presentation methods and explain the results of their calculations.

LEVEL 4

Candidates must be able to produce at least one extended example, including formulating and testing hypotheses and drawing conclusions, that requires them to:

- develop a strategy for using application of number skills over an extended period of time;
- monitor progress and adapt their strategy, as necessary, to achieve the quality of outcomes required in work involving deductive and inferential reasoning and algebraic manipulation;
- evaluate their overall strategy and present outcomes from their work, including use of charts, diagrams and graphs to illustrate complex data.

LEVEL 3

Candidates must be able to plan and carry through a substantial activity that requires them to:

- plan and use different sources and appropriate techniques to search for and select information, based on judgements of relevance and quality;
- use automated routines to enter and bring together information, and create and use appropriate methods to explore, develop and exchange information;
- develop the structure and content of their presentation, using others' views to guide refinements, and information from different sources.

LEVEL 4

Candidates must be able to produce at least one extended example that requires them to:

- develop a strategy for using IT skills over an extended period of time;
- monitor progress and adapt their strategy, as necessary, to achieve the quality of outcomes required in work involving the use of IT for two different complex purposes;
- evaluate their overall strategy and present outcomes from their work using a presentation showing integration of text, images and numbers.

At level 5, there is a single unit (personal skills development). This unit requires candidates to apply their key skills in communication, working with others and problem solving, in an integrated way, in order to improve their own learning and performance in managing professionally challenging work.

NB. *Please see publication QCA/99/483 for guidance on level 4 and level 5 key skills.*

General principles that underpin effective practice in using the key skills units

The list below of general principles is based on examples of effective practice drawn from a variety of education, training, employment and community contexts, including lessons learned from the evaluations conducted during the pilot stage of the Key Skills Qualification.

1   There should be a clear organisational policy for all six key skills that applies to all individuals.

2   Senior managers should demonstrate their commitment to putting policy into practice, by allocating responsibilities, providing sufficient resources and opportunities for staff training, programme planning and evaluation, and disseminating key messages for improving provision.

3   All staff should understand the concept of key skills and be capable of helping individuals to develop them, in ways that show the relevance of these skills to particular settings, as well as the wider context. As many staff as possible should be competent to assess key skills.

4   Prior achievements in key skills should be recognised, (whether they are derived from work, study or other activities) and opportunities provided for building on these achievements, so that individuals can work towards a level of key skills that is as high as possible.

5   There should be a variety of planned opportunities for learning and practising the skills of application, (as well as the techniques and underpinning knowledge), with constructive feedback provided on ways to improve performance.

6   Key skills should be made explicit, and learnt, practised and assessed within contexts that are relevant to individuals, so that they can see how key skills can improve the quality of their learning, performance and opportunities for progression, eg in further/higher education and employment.

7   Individuals should have their own copies of the units and should be encouraged to manage their own learning, including recording specific evidence of their achievements and building their portfolio as a continuous process.

8   Information, guidance and support should be available on a regular basis, so that individuals are able to plan development and assessment opportunities, and review and keep track of their progress in applying their skills in different contexts.

9   Achievements should be recorded against each component of the relevant key skill, with portfolio references indicating where specific evidence can be located. A variety of forms of evidence should be recognised, provided that the examples selected show clearly that the assessment criteria have been met.

10 There should be clear procedures for quality assurance, including an internal standards moderation process, and, where applicable, for cooperating with an awarding body on arrangements for external assessment and moderation.

It is important that people using the key skills units understand how these principles can be delivered in settings that are relevant to them, for example, through opportunities for networking, training and using guidance and support materials that provide examples of effective practice (see page 52 for contact addresses for the key skills support programme).

Key skills development

The units are addressed to the candidates and they should be given their own copy, with guidance from an appropriate person to ensure that they understand what is required. In order to meet the standards set out in the units, candidates will need to be confident and competent in Part A and Part B of the units:

Part A the techniques and knowledge associated with each key skill (the 'know how')	PLUS	Part B the application of skills (the 'thinking skills' that are integral to the units)

Candidates will need planned opportunities to:

- aquire the 'know how' (eg how to write grammatically correct text, carry out particular types of calculations and use editing facilities in a word processing package); and
- develop and practise the 'thinking skills' (eg skills in analysing tasks and problems, formulating questions, generating and adapting ideas, making decisions about methods, and the relevance and quality of information, checking, monitoring, evaluating and drawing conclusions).

All of the key skills units can be used to support target setting, planning, reviewing and recording processes, and so help to develop personal autonomy in learning and prompt candidates to make connections, for themselves, between the key skill demands of different contexts.

At the higher levels, candidates are expected to manage their own learning and make their own decisions about how they adapt their skills to meet different demands. However, for candidates working at the lower levels, teachers and trainers will need to think carefully about how they can provide structured learning opportunities that explicitly address the application of skills. Listed below are some ways that have been found helpful in doing this.

WAYS TO PROMOTE THE EFFECTIVE LEARNING OF KEY SKILLS

- careful sequencing of theory and practice components, to help candidates learn the techniques and knowledge underpinning key skills and see the relevance of what they are learning through practical experience;
- explicit tuition and practice in using learning strategies within a wide range of contexts;
- careful structuring of tasks that promote the ability to think by creating problems of sufficient challenge to stretch, but not deter, the candidates;
- systematic variation of tasks in order that learners can see how, and to what extent, existing skills can be applied to good effect in less familiar tasks and identify when new learning is required;
- opportunities to work with others (eg through collaborative use of IT, coaching, reciprocal teaching, pair problem solving) so that candidates are encouraged to express their reasons for adopting particular approaches and thus learn from each other what works and what doesn't work;
- providing candidates with precise feedback, not only on how they are doing, but also on what to do to improve;
- encouraging self-assessment and reflection by candidates (to think about their own thinking).

Key skills assessment and building a portfolio

The key skills units can be used for formative purposes (for self-assessment, and for giving constructive feedback to help candidates further develop their skills), as well as for confirming achievements for certification purposes (as single units, part of other qualifications or, if all three units are achieved, the Key Skills Qualification).

Formative assessment

Some candidates may need to choose key skills at a lower level than their main programme, in order to develop confidence and/or fill gaps in their learning. Others may be able to build on prior learning and achievements by starting at the same level as their main programme or at a higher level. Candidates will need guidance on this, as well as regular review and tracking of progress, and a variety of assessment opportunities, in order to receive feedback on performance. Some will need additional support in diagnosing and overcoming problems.

Part A of each unit can be useful, during initial assessment, for helping candidates to decide on the most appropriate level of key skills for them, by providing criteria for:

■ identifying their prior learning;

■ establishing their current capabilities;

■ informing decisions about teaching and learning, and support needs.

Activities can also be designed around the components in Part B for use in induction programmes: for example, to help candidates become familiar with the key skills units and assess their confidence in applying these skills.

Assessment for certification purposes

Full details of the requirements for certification, including the Key Skills Qualification, can be obtained from the awarding bodies that are approved to offer key skills (see page 52). But, in brief, to gain a qualification at levels 1–4, in the key skills of communication, application of number and information technology, candidates must pass both an internal assessment and an external assessment for each unit.

Internal assessment
internally organised;
focuses on the requirements
of Part B of the units;
based on a portfolio of evidence;
internally assessed;
externally moderated.

External assessment
externally-set;
samples from the whole unit;
corroborates the internal
assessment;
taken under supervised conditions;
externally-marked.

Building a portfolio

A portfolio is usually a file for presenting evidence of how candidates have met the requirements of the units. It may be hard-copy or an electronically-based storage and retrieval system. Portfolio building is an important skill in managing the learning and assessment processes. Candidates will need training to plan and organise their work from the outset, and guidance on the forms that evidence might take. The key skill of improving own learning and performance can provide a useful 'plan, do and review' structure for candidates to help them develop the skills for managing the portfolio, particularly when used with progress file materials.

The chart below lists some of the lessons learned from the pilot of the Key Skills Qualification.

PORTFOLIO MANAGEMENT

- candidates need to understand the role and importance of portfolio management.

- support and guidance to candidates must be carefully balanced. Set exercises can help candidates learn the skills involved in presenting evidence, but including a large amount of work of this type in a portfolio is unacceptable. Tutors and trainers must ensure they do not over-manage the process.

- Portfolio building should be started as soon as possible, as it is very difficult to catch up later.

- Candidates should be encouraged to identify evidence from a range of contexts (eg from across their programme of study, experience of work, community activities) that are relevant to their interests. It is not always possible, or desirable, to draw evidence from a single subject or work activity.

- Volume is not a measure of quality. Evidence should be carefully selected to show that the criteria have been met for each component of a key skill.

- It is helpful if assessors annotate evidence for feeding back their judgements to candidates.

- An index should be included to show where evidence can be found that meets each component of the key skills units. If evidence cannot be stored in the portfolio, its location should be recorded.

Forms of evidence

Evidence of how candidates have applied their skills is essential if candidates wish to gain certification of their achievements, as well as being useful to support statements made in a progress file or record of appraisal. Part C of each unit provides examples of evidence that can be used to prove candidates have the skills required. Evidence can take a variety of hand-produced and electronically-produced forms, including:

- written material, including number work;

- visual forms, such as artwork, photographs, charts, diagrams, graphs, screen displays;

- physical products, such as working models and artefacts;

- records from observations of the candidate's performance (viewed against the criteria for assessment), such as assessor notes to authenticate video clips or screen displays, and witness statements.

Not all of Part A of the unit has to be covered in the portfolio. But, more than one example of meeting in full the criteria for each key skill component in Part B is usually needed. For example, at level 2, the communication unit requires two different written documents and information technology must be used for two different purposes. This is to ensure that there is scope for candidates to show their ability to adapt their use of skills to meet different demands. It is helpful when work is annotated to show how it was produced and how it meets the specific assessment criteria. Draft material, or other ways of showing the development process, is often essential.

Introduction to the Amplification Sections

The aim of the guidance that follows is to assist readers in becoming familiar with the key skills units, in order to help develop consistency in interpretation of the national standards. Part A and Part B of each unit in communication, application of number and information technology, at levels 1–3, are reproduced for ease of reference. But, this publication should not be used in a stand-alone fashion. Assessors should refer to the units themselves (which also include examples of activities and evidence, in Part C), and supplement this guidance with:

■ exemplar materials that clearly show work that meets the standards;

■ information on external assessment;

■ staff development opportunities and standardisation exercises that are specifically designed for developing consistency in the interpretation of the units.

A range of training activities, and materials, is available for this purpose through awarding bodies and the key skills support programme (see page 52).

Part A guidance

The notes do not amplify all items in Part A, but highlight some requirements that are particularly significant at the respective level. Each unit focuses on the skills required at that level and assumes that the candidate is confident in the skills made explicit at the lower level. Candidates wishing to gain certification of the units will need to know how to do everything in Part A of the relevant unit, as the external assessment will sample items from across the unit as a whole. But, for internal assessment purposes, evidence does not need to cover all the items in Part A (only those items that are relevant to the particular activities undertaken and assessed through the Part B components).

Part B guidance

Guidance on Part B, and examples, relate to internal assessment of the portfolio. To count as evidence, each piece of work must fully meet all the assessment criteria for the relevant component of Part B. All components must be covered. Guidance on external assessment is provided by awarding bodies and readers are recommended to make contact with an awarding body at the earliest opportunity, if candidates wish to gain certification. Some candidates may be exempted from the external assessment of key skills, if they have already achieved named qualifications that are deemed to cover aspects of the relevant key skill at the specified level.

Communication, levels 1–3

Introduction

The aim of the communication units is to encourage candidates to develop and demonstrate their speaking, listening, reading and writing skills (including the use of images) for different purposes. The units are essentially concerned with developing and recognising the ability of candidates to *select* and *apply* skills in ways that are appropriate to their particular context. However, they can also be used to help individuals make connections with less familiar contexts and develop their ability to progress to higher levels of competence. Techniques (for example, in reading and writing) are essential, but so too are the skills of application, such as making decisions about the relevance and quality of information.

Progression from levels 1 to 3

The key skills units are designed to recognise candidates' progression in terms of both techniques and skills of application.

At level 1 candidates are required to use speaking, listening, reading and writing skills in the context of straightforward tasks, including taking part in discussions on everyday matters, identifying the main points and ideas in reading material, and producing short documents written in uncomplicated language.

At level 2 candidates are required to give a short talk, using an image to illustrate their main points, as well as contribute to a discussion by using more varied vocabulary and helping to move things forward. Candidates should be able to select relevant reading material from different sources and be able to use more advanced reading skills, both in order to follow lines of reasoning in lengthier documents and to summarise information. They must show they can adjust the structure and style of writing, using an appropriate form of extended document, and show they are capable of using complex sentences that are correctly spelt and punctuated.

At level 3 there is an increase in the complexity of materials and subject matter. Specialist vocabulary may be used and candidates are likely to be required to balance a number of points simultaneously, while evaluating the relative importance of each. In discussions, candidates need to be sensitive to the contributions of others, develop points and ideas and actively encourage others to participate. In making presentations, candidates should demonstrate a clear sense of purpose and be able to engage their audience's attention.

Reading matter should include extended documents that present a number of ideas (which may sometimes be abstract). Documents will tend to be detailed and require close reading in order to extract lines of reasoning. Candidates should demonstrate an ability to use materials in a systematic way so that they can quickly find relevant information, separate fact from opinion, spot biased writing and then synthesise their findings. Writing should use a style suited to the complexity of its subject and purpose, and be carefully reasoned and set out in a coherent and well-crafted manner.

Amplification of communication unit, level 1, Part A

Part A

WHAT YOU NEED TO KNOW

In discussions,

YOU NEED TO KNOW HOW TO:

■ find out about the subject so you can say things that are relevant;

■ judge when to speak and how much to say;

■ say things that suit the purpose of the discussion *(eg describe events, express opinions, develop ideas)*;

■ speak clearly in a way that suits the situation *(eg use appropriate tone of voice, expressions and manner to suit the formality of the situation, use language that everyone can understand)*;

■ show you are listening closely to what others say *(eg use body language, ask questions, make relevant comments, follow instructions, take messages)*.

In reading and obtaining information,

YOU NEED TO KNOW HOW TO:

■ obtain advice from others on what to read for different purposes *(eg to get instructions, facts, opinions, ideas)*;

■ identify the main points and ideas in different types of straightforward material *(eg letters, memos, extracts from books, newspaper or magazine articles)*, including images *(eg pictures, charts, diagrams, sketches)*;

■ use a dictionary;

■ ask others when you are unclear about what you have read;

■ prepare information so it is suitable for use *(eg collate information as notes to use in discussions or written material such as a letter or short essay)*.

In writing documents,

YOU NEED TO KNOW HOW TO:

■ use different written forms of presenting information *(eg business letters, memos, application forms, notes, short reports or essays)*;

■ use images to help the reader understand your main points *(eg pictures, charts, diagrams, sketches)*;

■ judge the relevance of information and the amount to include for your purpose *(eg to give or obtain facts, opinions, ideas)*;

■ make your meaning clear by writing, proof-reading and re-drafting documents so that:

 – words you use most often in your work or studies are spelled correctly;

 – sentences are formed correctly *(eg with subject–verb agreement such as 'she was', 'we were', with consistent use of tense)*;

 – sentences are marked by capital letters, full stops and question marks and organised into paragraphs where appropriate.

What you need to know – *In discussions*

■ *Subject* Candidates need to feel confident that they have something to say about the topic under discussion. This may involve finding out about the subject by asking questions, or making notes of relevant information from reading materials, the media or listening to explanations from others.

■ *Judge* Candidates should know how to open and close a discussion, respect the turn-taking rights of others, and how to use appropriate phrases to create an opportunity to make a contribution at an appropriate time. They may need practice in providing sufficient detail to make their point, without losing the attention of the listener(s) by talking for too long.

- *Purpose* Candidates should have practice in speaking for a range of purposes, eg to express statements of fact, give short explanations, instructions, accounts of events or incidents in a logical sequence, provide descriptions of people or places, express their own opinions and ideas. They should know how the purpose of a discussion can affect the nature of the discussion, and that their purpose may differ from that of others, eg a candidate may wish to discuss ideas for a project, while others in the group may be seeking information or confirmation of plans.

- *Situation* Candidates should be aware of how use of language is affected by the formality of the situation, ie the status and familiarity of those taking part in the discussion, and by the physical context, such as noise level, size and nature of the place where the discussion is held. Candidates may need practice in taking part in discussions in different situations to learn how to speak with appropriate loudness, clarity, speed and phrasing.

- *Listening closely* Candidates may develop listening skills by taking messages, and following straightforward explanations and instructions of varying length. They should know how to use body language to show they are listening, and be able to confirm this, eg by asking questions to clarify points.

What you need to know – *In reading and obtaining information*

- *Advice* Candidates should know who to ask and how to ask for help, ideas, information and clarification when needed, eg from peers, tutors or supervisors.

- *Identify main points* Candidates should know how to pick out main points and ideas from written materials that are routinely used in the context of their work, eg trace and understand the main events of descriptive or explanatory texts containing several paragraphs. They should be able to relate an image to printed text and use it to obtain meanings which may not be explicit in the text.

- *Dictionary* Candidates should know how to find the meaning of unfamiliar words.

- *Prepare information* Candidates need to understand and use structural features of texts, such as paragraphs and subheadings, to retrieve and collate information eg produce brief notes of key points from detailed reading of texts; marshal and order information prior to composing a letter.

What you need to know – *In writing documents*

- *Different forms of presenting* Candidates should be familiar with the conventions used for a range of documents, eg business letters, memos, application forms, notes, short reports or essays.

- *Images* Candidates should know how to use images to help the reader understand their main points. They should understand the need to label pictures, charts, diagrams, and sketches, etc and, where necessary, relate images to text.

- *Relevance* Candidates should know how much to write and the level of detail to include, and be aware that the relevance of information is affected by the type and purpose of the document being produced. For example, a short essay might provide an opportunity to explore opinions and ideas, whereas a memo or CV is likely to be restricted to factual information.

- *Meaning* Candidates should know how to plan, draft and revise their work so that it is correctly spelt, consists of complete sentences with correct use of tense and subject-verb agreement and, where appropriate, properly organised into a sequence of short paragraphs, so as to make meaning clear.

Guidance on internal assessment for communication, level 1, Part B

Part B

WHAT YOU MUST DO

You must:

C1.1

Take part in a one-to-one discussion and a group discussion about different, straightforward subjects.

Evidence must show you can:

- provide information that is relevant to the subject and purpose of the discussion;
- speak clearly in a way that suits the situation; and
- listen and respond appropriately to what others say.

C1.2

Read and obtain information from two different types of documents about straightforward subjects, including at least one image.

- read relevant material;
- identify accurately the main points and ideas in material; and
- use the information to suit your purpose.

C1.3

Write two different types of documents about straightforward subjects. Include at least one image in one of the documents.

- present relevant information in a form that suits your purpose;
- ensure text is legible; and
- make sure that spelling, punctuation and grammar are accurate so your meaning is clear.

At level 1, subject matter and materials should be straightforward, ie those that are commonly met in the context in which the candidates are working or studying that have content put across in a direct way with the main points being easily identified (usually sentence structures are simple and candidates will be familiar with the vocabulary). Candidates will need to be clear about their purpose for taking part in discussions, reading and obtaining information, and producing written documents. Evidence does not have to cover all the items described in Part A, but must meet all the assessment criteria (in the relevant box) for each component of Part B.

C1.1   In assessing a candidate's performance in one-to-one and group discussions, evidence from each discussion must show that the candidate is able to meet all the assessment crieteria, ie provide information that is relevant to the subject, speak clearly in a way that suits the situation, and listen and respond appropriately to what others are saying.

Evidence could include edited audio/video clips of the discussions that clearly show the assessment criteria being met, and/or records from observing the candidate meet the criteria. Witness statements can be useful as supporting evidence, but should not be the sole form of evidence for both discussions. Where they are used, they should include the date, the name, signature and contact details of the witness, and details of the context in which the observation took place. Assessors are responsible for judging the validity of witness statements; they may need to confirm with the witness that it is genuine and clarify points regarding the assessment criteria.

C1.2   Candidates are required to read and obtain information from two different types of documents about straightforward subjects (with at least one containing an image). When reading *each* of the documents, the candidate must show that she or he is able to meet all the assessment criteria, ie read relevant material, identify accurately the main points and ideas, and go on to use the information to suit their purpose. Evidence could include notes of the purpose for reading each document; recorded answers to questions or highlighted key points in the text; an annotated copy of the image; records of how the information was used (eg a discussion assessed for C1.1, a document assessed for C1.3, a product made by the candidate).

C1.3   In assessing a candidate's ability to write two different types of document about straightforward subjects (with at least one containing an image), evidence must show for *each* document that the candidate is able to meet all the assessment criteria, ie present relevant information in a form that suits their purpose, ensure text that is legible and make sure that spelling, punctuation and grammar are accurate so meaning is clear.

Evidence could include earlier drafts to show that the candidate has checked documents for errors and legibility (where text is electronically-produced, spacing, type-face and type-size must be appropriate for the intended reader/s). In final work, sentences must be marked correctly by capital letters and full stops or question marks. Where other types of punctuation are used, the candidate should not be penalised for occasional errors, providing meaning is still clear. If there are one or two spelling mistakes in a document, these should not be repeated in the second document. Where an assessor is uncertain about the candidate's writing ability, further evidence should be requested.

Amplification of communication unit, level 2, Part A

Part A

WHAT YOU NEED TO KNOW

In discussions,

YOU NEED TO KNOW HOW TO:

- use varied vocabulary and expressions to suit your purpose *(eg to present an argument, express ideas or opinions, exchange information)*;
- adapt your contributions to suit different situations *(eg the amount you say, your manner and tone of voice)*;
- show you are listening closely *(eg by body language)* and respond appropriately *(eg make tactful comments, ask questions to show interest)*;
- identify the speaker's intentions *(eg by manner, tone of voice, vocabulary)*;
- move the discussion forward *(eg summarise, develop points, focus on purpose)*.

In giving a short talk,

YOU NEED TO KNOW HOW TO:

- prepare for the talk *(eg research the topic, make notes, choose images)*;
- adapt your language to suit your subject, purpose and situation *(eg use standard English, avoid or explain technical terms, keep attention by varying tone of voice, giving examples)*;
- structure what you say to help listeners follow a line of thought or series of events *(eg by signalling new points: firstly ..., secondly... and finally)*;
- use images to help others understand the main points of your talk *(eg a model, picture, sketch plan or diagram to show what you mean)*.

In reading and summarising information,

YOU NEED TO KNOW HOW TO:

- use different sources to obtain relevant information *(eg to obtain and compare facts, opinions or ideas, obtain instructions or directions)*;

- skim materials to gain a general idea of content and scan text to identify the information you need from straightforward, extended documents *(eg reports, text books, articles of more than three pages with key points easily identified)*;
- recognise the writer's intentions *(eg by tone, vocabulary, structure of text)*;
- identify main lines of reasoning *(eg by signal words such as 'therefore', 'so', 'whereas')* and main points from text and images *(eg pictures, charts, diagrams)*;
- summarise information for a purpose *(eg a talk or written report)*.

In writing documents,

YOU NEED TO KNOW HOW TO:

- present written information in different forms *(eg letters, memos, extended documents such as essays or reports of more than three pages)*, including images *(eg pictures, sketches, charts, diagrams)*;
- structure your material to help readers follow what you have written and understand the main points *(eg use paragraphs, headings and sub-headings)*;
- use different styles of writing to suit different purposes *(eg persuasive techniques to present arguments, technical vocabulary, supporting evidence for reports)*;
- make meaning clear by writing, proof-reading and re-drafting documents so that:
  - words most often used in your work or studies are spelled correctly and spelling of irregular words is checked *(eg use a dictionary or spell-checker)*;
  - complex sentences are formed correctly *(eg use of 'but', 'then', 'because', consistent use of tense)* and organised into paragraphs where appropriate;
  - punctuation is accurate *(eg use of commas, apostrophes, inverted commas)*.

What you need to know – *In discussions*

- *Speaker's intentions* Candidates should recognise signs that indicate purpose, such as choice of vocabulary, tone of voice and body language, in order to respond appropriately.

- *Move discussion forward* Candidates should know how to maintain momentum eg how to summarise what has been said; respond to and offer constructive criticism, provide evidence to support opinions and arguments, use appropriate phrases to change the direction of the discussion or re-focus on its purpose, develop points and open up new ideas.

What you need to know – *In giving a short talk*

- *Adapt* Candidates should know how to use a style of language to suit the subject and purpose of their talk, eg when giving explanations, instructions and accounts of events or presenting an argument, be able to adapt the pitch and pace of their talk to suit the situation (eg room size and noise level), taking into account status and familiarity of listeners, and vary tone of voice to keep attention.

- *Structure* Candidates should know how to present information and ideas in a clear sequence, using cues to signal key points or change of tack, so as to take listeners with them.

- *Images* Candidates may need practice in using an image to help others understand their main points. They should ensure that the image is suitable for its purpose, whether they produce their own charts or diagrams, or select images from other sources.

What you need to know – *In reading and summarising information*

- *Sources* Candidates should know how to locate texts, such as reference books, textbooks, manuals, magazines, newspapers and dictionaries, so they can use different sources to obtain information (eg to compare facts, opinions or ideas).

- *Skim/scan* Candidates should know how to use different reading strategies (skimming, scanning, detailed reading) for finding their way around, and extracting information from, fairly lengthy material (more than three pages).

- *Writer's intentions* Candidates should know how to identify the purpose of a text (eg to inform, persuade) by its use of vocabulary and structure, in order to make judgements about its relevance.

- *Lines of reasoning* Candidates should know how to read critically in following a sequence of information or ideas in explanatory or persuasive texts (of more than 3 pages), and how to identify points of view when reading an argument.

- *Summarise* Candidates should know how to distinguish between what is, or is not relevant to their purpose, and be able to present the essence of what they read in a concise way.

What you need to know – *In writing documents*

- *Structure* Candidates should know how to organise work in a logical or persuasive sequence, using paragraphs and features such as headings and sub-headings, where suitable.

- *Styles* Candidates should know how to use formal and informal language, including, for example, persuasive techniques, technical vocabulary and evidence to support points made, to suit different purposes for writing.

- *Proof-reading* Candidates should know that they should always check the work they produce to ensure it is correctly spelt and punctuated, and organised into paragraphs where appropriate, and that meaning is clear. They should be able to spell correctly words most often used in their work or studies and be able to check the spelling of irregular words. They should know how to write complex sentences, eg use 'but', 'then' and 'because', consistent use of tense, as well as subject-verb agreement (included at level 1), and use accurately punctuation such as commas, apostrophes and inverted commas (as well as capital letters, full stops and question marks included at level 1).

Guidance on internal assessment for communication, level 2, Part B

Part B

WHAT YOU MUST DO

You must:

Evidence must show you can:

C2.1a

Contribute to a discussion about a straightforward subject.

- make clear and relevant contributions in a way that suits your purpose and situation;
- listen and respond appropriately to what others say; and
- help to move the discussion forward.

C2.1b

Give a short talk about a straightforward subject, using an image.

- speak clearly in a way that suits your subject, purpose and situation;
- keep to the subject and structure your talk to help listeners follow what you are saying; and
- use an image to clearly illustrate your main points.

C2.2

Read and summarise information from two extended documents about a straightforward subject. One of the documents should include at least one image.

- select and read relevant material;
- identify accurately the lines of reasoning and main points from text and images; and
- summarise the information to suit your purpose.

C2.3

Write two different types of documents about straightforward subjects.

One piece of writing should be an extended document and include at least one image.

- present relevant information in an appropriate form;
- use a structure and style of writing to suit your purpose; and
- ensure text is legible and that spelling, punctuation and grammar are accurate, so your meaning is clear.

At level 2 subject matter and materials should be straightforward, ie those that are commonly met in the context in which the candidates are working or studying, which have content put across in a direct way with lines of reasoning and main points being easily identified. However, candidates will build on the skills at level 1 by being able to take responsibility for moving forward a discussion, giving a short talk and reading, summarising and producing lengthier documents (of more than three pages). Evidence does not have to cover all the items described in Part A, but must meet all the assessment criteria (in the relevant box) for each component of Part B.

C2.1a   The expectation is that the discussion is in a group, although if this is difficult to arrange in particular contexts, discussion could be on a one-to-one basis. Assessment of a candidate's contributions to discussion must include evidence that they can make clear and relevant contributions in a way that suits their purpose and situation. The candidate must show evidence of listening and responding appropriately to what others say and demonstrate an ability to keep the discussion going, eg by summarising what has been said, developing points made or focusing on purpose by asking questions.

C2.1b   The candidate must give a brief (eg 5–6 minutes) talk, normally to two or three familiar people. The subject matter will usually be closely connected with her or his work, an area of interest or programme of study. Brief notes may be used as a prompt, but the candidate should not read these out. Assessors should look for clarity of expression and evidence that the talk is well structured, keeps to the point and gives a clear illustration of the main points (through use of at least one image). There should be confirmation that the talk has been followed by listeners with little difficulty.

Evidence for C2.1a and C2.1b could include edited audio/video clips of the discussion and talk, and/or assessor records from observing the candidate, that clearly show the assessment criteria being met. Witness statements can be useful as supporting evidence, but should not be the sole form of evidence for a and b. Where used, they should include the date, the name, signature and contact details of the witness, and details of the context in which the observation took place. Assessors are responsible for judging the validity of statements; they may need to confirm with the witness that it is genuine and clarify points regarding the assessment criteria.

C2.2   The two extended documents (each being more than three pages in length, with one including at least one image) should relate to the same straight-forward subject and be used together in meeting the assessment criteria. The documents could be the same, or different types, depending on their relevance to the candidate's purpose for reading. In assessing the candidate's performance, evidence must show that she or he is be able to select relevant material, identify accurately lines of reasoning and the main points from both text and image, and summarise the information to suit her or his purpose.

C2.3   The candidate is required to produce two different types of documents about straightforward subjects, one of which must be a more extended piece (more than three pages) containing an image. For *each* document, the candidate must show she or he can meet all the assessment criteria, ie can present relevant information in a form, structure and style that suits her or his purpose, ensure text is legible, accurately spelt and punctuated, and grammatically correct, so meaning is clear.

In final work, sentences (including complex ones, where these are used) must be formed correctly, with accurate punctuation (eg commas, apostrophes, inverted commas), as well as capital letters and full stops or question marks. The candidate should not be penalised for one or two errors, providing meaning is still clear and mistakes in one document are not repeated in the second document. Where an assessor is uncertain about the candidate's writing ability, further evidence should be requested.

Examples

C2.3:
a straightforward written document at this level might include: a letter, memo, an application form, a set of instructions, hand-out or annotated poster. An extended document might include an illustrated essay, report including a graph, a newspaper-type article with a picture, a script for a radio/TV programme with a sketch; a brochure with graphics. Electronically produced material can be used, provided that it is authenticated as the candidate's own work.

Amplification of communication unit, level 3, Part A

Part A

WHAT YOU NEED TO KNOW

In discussions,

YOU NEED TO KNOW HOW TO:

- vary how and when you participate to suit your purpose *(eg to present a complicated line of reasoning or argument, explain events, express opinions and ideas)* and the situation *(eg formality, nature of the group)*;
- listen and respond sensitively *(eg acknowledge gender and cultural aspects, how others might be feeling)* and develop points and ideas;
- make openings to encourage others to contribute *(eg invite others to speak, ask follow-up questions to encourage people to develop points)*.

In making a presentation,

YOU NEED TO KNOW HOW TO:

- prepare the presentation to suit your purpose *(eg present an argument in a debate, findings from an investigation, outcomes from a design brief)*;
- match your language and style to suit the complexity of the subject, the formality of the situation and the needs of the audience *(eg confidently use standard English, precisely use vocabulary)*;
- structure what you say *(eg help listeners follow the sequence of main points, ideas)*;
- use techniques to engage the audience, including images *(eg give examples to illustrate complex points, relate what is said to audience experience, vary tone of voice, use images, such as charts, pictures and models to illustrate points)*.

In reading and synthesising information,

YOU NEED TO KNOW HOW TO:

- find and skim read extended documents, such as text books, secondary sources, articles and reports, to identify relevant material *(eg to extend thinking around a subject, obtain evidence, opinions and ideas)*;

- scan and read the material to find the specific information you need;
- use appropriate sources of reference to help you understand complex lines of reasoning and information from text and images *(eg consult databases and other texts, ask others for clarification)*;
- compare accounts and recognise opinion and possible bias *(eg identify the writer's intentions by the way meaning and information is conveyed)*;
- synthesise the information you have obtained for a purpose *(eg present your own interpretation of the subject in a way that brings information together in a coherent form for a report or presentation)*.

In writing documents,

YOU NEED TO KNOW HOW TO:

- select appropriate forms for presenting information *(eg extended essay or report, images, such as pictures, charts and diagrams)* to suit your purpose *(eg present an argument, ideas, a complicated line of reasoning or a series of events)*;
- select appropriate styles to suit the degree of formality required and nature of the subject *(eg use vocabulary, sentence structures and tone that suit the intended readers and the complexity or sensitivity of the subject)*;
- organise material coherently *(eg use paragraphs, headings, sub-headings, indentation and highlighting, link information and ideas in an ordered way using words such as 'however', 'therefore')*;
- make meaning clear by writing, proof-reading and re-drafting documents so that spelling, punctuation and grammar are accurate.

What you need to know – *In discussions*

- *Respond sensitively* Candidates should know how to recognise signs that indicate how others may be feeling and know how to respond in an unbiased way, so that all have their say irrespective of their gender, ethnic background or other characteristics. They should respect the fact that others may have opinions and ideas which are different from their own.

- *Make openings* Candidates should know they must go beyond simply inviting others to speak, by actively encouraging them to do so, eg by supporting points made, asking follow-up questions.

What you need to know – *In making a presentation*

■ *Prepare* Candidates should know how to prepare notes, illustrations and any other aids, and appreciate the conventions of certain types of presentation (eg debates, meetings, presenting artwork). Candidates should be given practice, with feedback on content and delivery.

■ *Audience needs* Candidates will need confidence in speaking about complex matters, while ensuring that language and style suit their audience and situation. It is important that they can structure their presentations so that their audience can follow their ideas and arguments, eg using key points on a flip chart, wallboard or overhead projector. Candidates should know how to begin a presentation (eg outline what they will be talking about), pace it, invite and respond to audience participation, and end it effectively (eg summarise main points). They should know about useful techniques for helping to engage audience attention (eg careful use of body language, illustrative anecdotes), including how to use images.

What you need to know – *In reading and synthesising information*

■ *Sources of reference* Candidates should know where to find the information they need and how to access information and obtain clarification, whether from written sources, face to face, by phone or other electronic means.

■ *Compare* Candidates should know how to find their way through the material to identify the author's main points and lines of reasoning and how to read critically in comparing accounts, eg how to recognise the purpose of texts from styles of writing, obtain meaning by inference and deduction, distinguish between fact and opinion and how to look for evidence of bias.

■ *Synthesise* Candidates are expected to go beyond just summarising findings from their reading. They should know how to assess and sort facts, opinions and ideas so they can then bring these together and present their own interpretations in a coherent form.

What you need to know – *In writing documents*

■ *Styles* Candidates should know how to produce writing that takes account of the vocabulary, tone and techniques normally used when producing documents for particular purposes and different audiences. Candidates should be able to write with confidence and with the appropriate degree of formality for the task in hand (eg formal and informal letters, completing official forms, writing e-mails or personal notes, producing an essay or report).

■ *Coherence* – it is essential that candidates know how to organise their work into a coherent whole, linking paragraphs in various ways and using features, such as indentation and highlighting, to suit different types of documents

■ *Proof-reading* Candidates should know how to check their work to ensure that spelling, punctuation and grammar are accurate. For example, candidates should know how to: write grammatically correct sentences, including correct use of a variety of verb tense, form and person (eg conditional, passive voice); spell accurately complex, irregular and technical words; use punctuation effectively (eg bullet points, semicolon, colon, apostrophes for omission and possession) to ensure their meaning is clear.

Guidance on internal assessment for communication, level 3, Part B

Part B

WHAT YOU MUST DO

You must:

C3.1a

Contribute to a group discussion about a complex subject.

Evidence must show you can:

- make clear and relevant contributions in a way that suits your purpose and situation;
- listen and respond sensitively to others, and develop points and ideas; and
- create opportunities for others to contribute when appropriate.

C3.1b

Make a presentation about a complex subject, using at least one image to illustrate complex points.

- speak clearly and adapt your style of presentation to suit your purpose, subject, audience and situation;
- structure what you say so that the sequence of information and ideas may be easily followed; and
- use a range of techniques to engage the audience, including effective use of images.

C3.2

Read and synthesise information from two extended documents about a complex subject.

One of these documents should include at least one image.

- select and read material that contains the information you need;
- identify accurately, and compare, the lines of reasoning and main points from texts and images; and
- synthesise the key information in a form that is relevant to your purpose.

C3.3

Write two different types of documents about complex subjects.

One piece of writing should be an extended document and include at least one image.

- select and use a form and style of writing that is appropriate to your purpose and complex subject matter;
- organise relevant information clearly and coherently, using specialist vocabulary when appropriate; and
- ensure your text is legible and your spelling, grammar and punctuation are accurate, so your meaning is clear.

At Level 3, a candidate will demonstrate communication skills by dealing with complex subjects and materials. She or he will build on level 2 skills by creating opportunities for others to contribute in a group discussion, responding with sensitivity to what they say, making a presentation, synthesising information from reading material, and producing documents that are appropriate for complex subjects. Evidence does not have to cover all the items described in Part A, but must meet all the assessment criteria (in the relevant box) for each component of Part B.

C3.1a   The candidate's contributions to a group discussion on a complex subject must be clear and relevant to the situation and purpose of the occasion. The candidate must show evidence of being responsive and sensitive to others in the group, demonstrate ability to create opportunities for them to contribute, and show that she or he is capable of developing points and ideas.

C3.1b   The candidate must give a presentation about a complex subject. Brief notes may be used as a prompt, but should not be read out. Assessors should look for styles of presentation that are relevant to the needs of the audience, the situation and subject matter. The candidate must give a well-structured delivery, using a range of techniques to engage the audience that include effective use of images. There should be evidence that the audience has been able to follow easily the main points of the presentation.

Evidence for C3.1a and C3.1b could include edited audio/video clips of the discussion and presentation, and/or assessor records from observing the candidate, that clearly show the assessment criteria being met. Witness statements can be useful as supporting evidence, but should not be the sole form of evidence for a and b. Where used, they should include the date, the name, signature and contact details of the witness, and details of the context in which the observation took place. Assessors are responsible for judging the validity of statements; they may need to confirm with the witness that it is genuine and clarify points regarding the assessment criteria.

C3.2   The two extended documents, one of which must include at least one image, should relate to the same complex subject. The documents could be the same, or different types, depending on their relevance to the candidate's purpose for reading. Assessors should look for evidence that the candidate can select relevant material and compare, as well as identify accurately the lines of reasoning and main points from both texts and images. The synthesis must go beyond a summary by including the candidate's own interpretation in bringing together information in a coherent form for a specified purpose.

C3.3   The candidate is required to produce two different types of documents about complex subjects, and one of these must be extended and contain at least one image. Complex subjects include those that deal with abstract or sensitive issues, and lines of enquiry dependent on clear reasoning. For each document, assessors should look for evidence that the candidate has met all the assessment criteria, ie selected a form of document and style of writing that are appropriate for both the subject and purpose for writing; organised relevant information using a clear and coherent structure, with use of specialised vocabulary when appropriate; and ensured text is legible, with accurate use of spelling, grammar and punctuation, so meaning is clear. The candidate should not be penalised for one or two errors, providing meaning is still clear and mistakes in one document are not repeated in the second document. Where an assessor is uncertain about the candidate's writing ability, further evidence should be requested.

Application of number, levels 1–3

Introduction

The aim of the application of number units is to encourage candidates to develop and demonstrate their skills in interpreting information involving numbers, carrying out calculations, interpreting results and presenting findings. The units are essentially concerned with developing and recognising the ability of candidates to *select* and *apply* numerical, graphical and related mathematical skills in ways that are appropriate to their particular context. However, they can also be used to help individuals make connections with less familiar contexts and develop their ability to progress to higher levels of competence.

Techniques such as being able to measure and read scales, carry out specific calculations, or draw a particular type of diagram, are essential, but so too are the skills of application, such as interpreting information from tables, graphs or charts, selecting appropriate methods, describing what findings show, etc. Techniques and skills of application both contribute to understanding a task or problem and to deciding on the best course of action.

Progression from levels 1–3

The key skills units are designed to recognise candidates' progression in terms of both techniques and skills of application.

At level 1 candidates are required to handle simple numerical and graphical information, and techniques applied in the context of short, straightforward activities. Calculations will usually involve only one or two steps. Much of the numerical content will be concerned with whole numbers and the use of decimals in everyday contexts (eg in using money or taking measurements), and the use of common units of measurement.

At level 2 candidates are required to set their use of application of number skills in the context of at least one substantial activity. Such an activity will give them more scope to make decisions on how to find the information they need, what calculations to use, and how best to present their findings. Calculations will involve two or more steps and a more demanding range of techniques and understanding. Candidates will be expected to know how to work with numbers of any size, including addition and subtraction of fractions, calculations involving area and volumes, ratio, unit conversions, percentages and scaling, as well as the use of formulae and graphs.

At level 3 there is an increase in the complexity of activities and techniques needed. Candidates are required to be responsible for planning and carrying through their use of application of number in the context of at least one substantial and complex activity, including handling data from a large data set (over 50 items). Compared with level 2, calculations will involve several stages. Candidates need to justify their approaches and methods, in addition to presenting their findings. Calculations involve use of compound units and powers, as well as rearranging formulae.

Amplification of application of number unit, level 1, Part A

Part A

WHAT YOU NEED TO KNOW

In interpreting information,
YOU NEED TO KNOW HOW TO:

- read and understand straightforward tables, charts, diagrams and line graphs;
- read and understand numbers used in different ways *(eg large numbers in figures or words, simple fractions, decimals, percentages)*;
- measure in everyday units *(eg minutes, millimetres, litres, grams, degrees)* by reading scales on familiar measuring equipment *(eg watch, tape measure, measuring jug, weighing scales, thermometer)*;
- make accurate observations *(eg count number of people or items)*;
- identify suitable calculations to get the results you need for your task.

In carrying out calculations,
YOU NEED TO KNOW HOW TO:

- work to the level of accuracy you have been told to use *(eg round to the nearest whole unit, nearest 10, two decimal places)*;
- add, subtract, multiply and divide with whole numbers and simple decimals *(eg two decimal places)*;
- understand and find simple fractions and percentages *(eg ²/₃ of £15 is £10, 75% of 400 is 300)*;
- work out areas of rectangular spaces *(eg floor area)*;

- work out volumes of rectangular-based shapes *(eg a box)*;
- use straightforward scales on diagrams *(eg 10mm to 1m)*;
- use ratios and proportion *(eg three parts to one part)*;
- find the average (mean) of up to 10 items *(eg temperatures, prices, time)*;
- find the range for up to 10 items *(eg temperature range from highest to lowest was 16°C)*;
- check calculations using different methods *(eg estimate to reject impossible answers, check a subtraction by 'adding back')* to make sure they make sense.

In interpreting results and presenting your findings,
YOU NEED TO KNOW HOW TO:

- use suitable ways of presenting information, including a chart and diagram;
- use the correct units *(eg for area, volume, weight, time, temperature)*;
- label your work correctly *(eg use a title or key)*;
- describe how the results of your calculations meet the purpose of your task.

What you need to know – *In interpreting information*

- *Understand straightforward tables, charts, diagrams and line graphs*
  Candidates should know how to obtain information from tables, such as a timetable or price list, charts, such as a pictogram, pie chart or bar chart (eg to identify the number of items sold on a given day, the sales for a week or the day with the most sales), diagrams, such as a simple map, workshop drawing or plan using a scale such as 10mm to 1m, and single line graphs (eg to identify the temperature at given times of day, the time of day when the temperature was highest or lowest).

■ *Read and understand numbers* Candidates should know how to deal with numbers presented in different ways, eg write down spoken numbers, such as 'one thousand and fifty', or 'three fifths', recognise decimal fractions and know that one third is a bit more than 30% or 0.3.

■ *Measure and observe* Candidates should know how to read off numbers from scales, eg from a thermometer or a rule when taking measurements, and make accurate observations, eg when carrying out stock checks.

■ *Identify calculations* Candidates should know how to pick out the calculation needed for a task, eg 'I must multiply these numbers' or 'I must divide by 100'.

What you need to know – *In carrying out calculations*

■ *Level of accuracy* Candidates should know how to work to given levels of accuracy, such as the nearest pound (£) or nearest hundredth, and to round results (eg 12.458 on a calculator means £12.46).

a) *amounts and sizes* Candidates should know how to work with:

decimals – in the context of everyday tasks such as dealing with money and measuring, eg how to multiply and divide decimals by 10, 100, 1000.

fractions and percentages – how to find parts, such as $2/3$ or $3/4$ of whole number amounts or measurements, and find percentages, including how to carry out calculations to work out increases in amounts (eg a 10% rise in cost) and decreases in amounts (eg a 20% reduction in a sale). Candidates should know how to convert within the same system, eg convert 70 minutes to 1 hour 10 minutes, 0.36 metres to 360mm, know that 0.6 hours is not 6 minutes, but 0.6 x 60 = 36 minutes.

areas and volumes – how to find a rectangular area in m^2 or volume of a box in cm^3.

b) *scales and proportion* Candidates should know how to use simple scales on diagrams to work out actual measurements and how to increase and reduce whole-number amounts using ratio and direct proportion, eg scale up amounts of food for three times the number of people or put items in two piles, one with twice as many items as the other.

c) *handling statistics* Candidates should know how to calculate the range and mean, understanding that mean is a 'central value' of a group of numbers with some higher and some lower.

■ *Check calculations* Candidates should know how to estimate the likely results of their calculations, eg 'It's got to be between 10 and 15, so 128 is bound to be wrong, but 12.8 could be correct', and how to check using inverse operations.

What you need to know – *In interpreting results and presenting findings*

■ *Presenting* Candidates should know how to present information in different ways, eg be able to choose for themselves when to present discrete data in a bar chart, draw a diagram such as a plan of a room or piece of equipment (this does not need to be to scale). They should know how to use common measures and units of measurement to define quantities and be familiar with the conventions of labelling charts and diagrams.

■ *Describing results* Candidates should know how to present their findings in ways that show how the results of their calculations relate to the purpose of their task, eg show that the results of their calculations suggest that the answer to the original question is 'no'.

Guidance on internal assessment for application of number, level 1, Part B

Part B

WHAT YOU MUST DO

You must:

Evidence must show you can:

N1.1

Interpret straightforward information from two different sources. At least one source should be a table, chart, diagram or line graph.

- obtain the information you need to meet the purpose of your task; and
- identify suitable calculations to get the results you need.

N1.2

Carry out straightforward calculations to do with:

  a. amounts and sizes;

  b. scales and proportion;

  c. handling statistics.

- carry out calculations to the levels of accuracy you have been given; and
- check your results make sense.

N1.3

Interpret the results of your calculations and present your findings. You must use one chart and one diagram.

- choose suitable ways to present your findings;
- present your findings clearly; and
- describe how the results of your calculations meet the purpose of your task.

At level 1, subject matter and materials should be straightforward, ie those commonly met in the context in which the candidates are working or studying and have content put across in a direct way so that candidates can easily identify the information they need for their task. The precise nature of the information and calculations will depend on their relevance to the task.

For Part B, all calculations must be clearly set in context and not be stand-alone exercises. Evidence does not have to cover all the items described in Part A, but must meet all the assessment criteria (in the relevant box) for each component of Part B. Candidates must show they are clear about their purpose for obtaining information and carrying out calculations, and describe how their results meet the purpose of the task they have undertaken.

N1.1   In assessing a candidate's performance in interpreting straightforward information, evidence relating to *each* source must show that the candidate can obtain the information required, and can identify, for themselves, the calculations that are suitable for getting the results they need. One source must be a table, chart, diagram or line graph. The second source may be direct observation or measurement, but it does not have to be; it could be a different type of graphical source, eg a diagram if a table, chart or line graph was chosen in the first instance. Evidence of candidates being able to pick suitable calculations could be a record of describing their choice to a tutor or trainer. Evidence needs to make clear the purpose of the tasks that were tackled and include copies of source material (and, where relevant, details of site of observation/measurement) and records of information obtained.

N1.2   In assessing a candidate's performance in carrying out calculations, assessors should look for examples (at least one from each category) of working with amounts and sizes (eg working out costs or the area of a room); scales and proportion (eg in using a map or working out how to mix or dilute a household product); and handling statistics (eg in working out temperature mean and range). Evidence must include records of how the candidate has checked that the results make sense.

N1.3   In assessing a candidate's performance in interpreting the results of calculations and presenting findings, assessors should look for (and document) evidence to show that the candidate can make unaided, a suitable choice of chart and diagram, with appropriate labels and correct use of units. It is also important that the candidate can show how the results of calculations relate to the purpose of the task, eg more staff are needed to handle enquiries between 12.30 and 1.30 because findings show this as the busiest time (a total of 48 enquiries being made, compared to 27 at other times of the day). Information technology can be used for producing charts and diagrams, providing the candidate can use these to clearly present findings.

Amplification of application of number unit, level 2, Part A

WHAT YOU NEED TO KNOW

In interpreting information,
YOU NEED TO KNOW HOW TO:

- obtain relevant information from different sources *(eg from written and graphical material, first-hand by measuring or observing)*;
- read and understand graphs, tables, charts and diagrams *(eg frequency diagrams)*;
- read and understand numbers used in different ways, including negative numbers *(eg for losses in trading, low temperatures)*;
- estimate amounts and proportions;
- read scales on a range of equipment to given levels of accuracy *(eg to the nearest 10mm or nearest inch)*;
- make accurate observations *(eg count the number of customers per hour)*;
- select appropriate methods for obtaining the results you need, including grouping data when this is appropriate *(eg heights, salary bands)*.

In carrying out calculations,
YOU NEED TO KNOW HOW TO:

- show clearly your methods of carrying out calculations and give the level of accuracy of your results;
- carry out calculations involving two or more steps, with numbers of any size;
- convert between fractions, decimals and percentages;
- convert measurements between systems *(eg from pounds to kilograms, between currencies)*;

- work out areas and volumes *(eg area of an L-shaped room, number of containers to fill a given space)*;
- work out dimensions from scale drawings *(eg using a 1:20 scale)*;
- use proportion and calculate using ratios where appropriate;
- compare sets of data with a minimum of 20 items *(eg using percentages, using mean, median, mode)*;
- use range to describe the spread within sets of data;
- understand and use given formulae *(eg for calculating volumes, areas such as circles, insurance premiums, V=IR for electricity)*;
- check your methods in ways that pick up faults and make sure your results make sense.

In interpreting results and presenting your findings,
YOU NEED TO KNOW HOW TO:

- select effective ways to present your findings;
- construct and use graphs, charts and diagrams *(eg pie charts, frequency tables, workshop drawings)*, and follow accepted conventions for labelling these *(eg appropriate scales and axes)*;
- highlight the main points of your findings and describe your methods;
- explain how the results of calculations meet the purpose of your activity.

What you need to know – *In interpreting information*

- *Obtain relevant information* Candidates should know how to read and understand graphical, numerical and written material, in order to independently select and compare sets of data, check or confirm expectations, and make judgements about what information is relevant to the purpose of their activity (eg be able to interpret information from bar charts, pie charts and graphs with more than one line, draw conclusions from scatter diagrams using basic ideas of correlation and interpret diagrams that show layouts). They should also know how to obtain information first-hand, by measuring or observing, in order to record discrete and continuous data.

■ *Read and understand numbers* Candidates should know how to read and understand numbers presented in different ways eg understand negative numbers used in practical contexts, such as appreciating that −2.3º is less than −2º when measuring temperature.

■ *Estimate* Candidates should know how to make straightforward comparisons and related mental calculations, eg the length of a room is about three times its width, the proportion of male clients is about three-fifths, the stockroom is about two thirds full.

■ *Read scales* Candidates should know how to read scales to given levels of accuracy for the task in hand, including scales that require interpolation (ie estimating a reading between two known readings).

■ *Select methods* Candidates should know how to generate results to an appropriate level of accuracy, using methods and measures appropriate to the specified purpose. They need to make their own decisions about methods for carrying through a task, eg 'to find the mean and produce a frequency chart, it would save me time to group data in a frequency table' or 'to estimate costs for a poster display, I first need to work out how many A3 posters there is room for'.

What you need to know – *In carrying out calculations*

■ *Show/check methods* Candidates need to make explicit the methods they have used to make calculations, so they are able to pick up errors and make sure results make sense. Level of accuracy could be to the nearest 10mm when making measurements, but it could also include lower and upper limits, such as between 15 and 20 m². They should be able to use approximations to corroborate results.

■ *Calculations* Candidates should know how to make calculations involving two or more steps, ie use at least two operations in a sequence (eg multiply and add to find the area of an L-shaped room) when working with:

   a) *amounts and sizes* eg when solving problems that involve converting between fractions, decimals and percentages, different currencies or systems of measurement; evaluating one number as a fraction or percentage of another; working out volumes and areas of composite shapes;

   b) *scales and proportion* eg when enlarging shapes by using a positive whole number scale factor, calculating ratios such as sharing £60 in the ratio 3:5;

   c) *statistics* eg when finding the mean, median and mode (from charts, for example, showing two weeks' sales results), and using them to compare two sets of data; finding the range and using it to describe the spread within sets of data;

   d) *formulae* eg when using given formulae expressed in words, as rules (eg 'length in cm/2.54=length in inches'), as well as those using symbols (eg c/2.54=I).

What you need to know – *In interpreting results and presenting findings*

■ *Presenting* Candidates should know how to present and explain results using numerical, graphical and written formats appropriate to their purpose and findings.

■ *Construct and use graphs, charts and diagrams* Candidates should know how to draw accurate and clear pie charts, frequency diagrams and graphs, so they understand how they can be used in presenting data, including the conventions for labelling. If information technology is used, it is essential that candidates can check the accuracy of, and explain, the examples they use;

■ *Highlight main points/explain results* Candidates should know how to present the main results of their findings and calculations, rather than give a narrative account of everything they did, and be able to explain how results relate to the original purpose of the activity.

Guidance on internal assessment for application of number, level 2, Part B

Part B

WHAT YOU MUST DO

You must:

Carry through at least one substantial activity that includes straightforward tasks for N2.1, N2.2 and N2.3.

N2.1

Interpret information from two different sources, including material containing a graph.

Evidence must show you can:

- choose how to obtain the information needed to meet the purpose of your activity;
- obtain the relevant information; and
- select appropriate methods to get the results you need.

N2.2

Carry out calculations to do with:

a   amounts and sizes;

b   scales and proportion;

c   handling statistics;

d   using formulae.

- carry out calculations, clearly showing your methods and levels of accuracy; and
- check your methods to identify and correct any errors, and make sure your results make sense.

N2.3

Interpret the results of your calculations and present your findings. You must use at least one graph, one chart and one diagram.

- select effective ways to present your findings;
- present your findings clearly and describe your methods; and
- explain how the results of your calculations meet the purpose of your activity.

At level 2, candidates are expected to demonstrate their skills in the context of at least one substantial activity that can be broken down into tasks for each component of the unit, ie candidates are expected to use information (obtained in N2.1) in carrying out calculations (for N2.2), and go on to interpret the results of these calculations in the context of presenting findings (N2.3).

In some contexts, it may not be possible to find one natural activity that can provide opportunities for all four types of calculations. In such cases candidates should undertake another activity that requires them to meet the assessment criteria for N2.1 and N2.3, as well as N2.2. Use of the two sources and forms of presenting findings could be split between the two different activities. However, for Part B, all calculations must be clearly set in context and not be stand-alone exercises. Evidence does not have to cover all the items described in Part A, but must meet all the assessment criteria (in the relevant box) for each component of Part B. Candidates must show they are clear about the purpose of each activity.

Guidance should be given to candidates on the types of activity that will provide sufficient scope for covering all aspects of Part B, but candidates must both identify and carry out the tasks for themselves.

N2.1   In assessing a candidate's performance in interpreting straightforward information, assessors should look for evidence of information obtained from two different sources. One source must be material that includes a graph. The other example could be another form of graphical or written material, or direct measurements or observations, depending on the context in which the candidate is working. The candidate must show that she or he can use each source to obtain information that is relevant to the purpose of the activity, and can select, unaided, appropriate methods to get the results needed. Evidence needs to make clear the purpose of the activity and include a note of how choices were made, plus copies of source material (and, where relevant, details of site of observation/measurement) and records of information obtained.

N2.2   In assessing a candidate's performance in carrying out calculations involving two or more steps, assessors should look for examples (at least one from each category) of working with amounts and sizes; scales and proportion; handling statistics; and using formulae. In handling statistics, the candidate must show that she or he can compare sets of data with a minimum of 20 items. Evidence must include records of the calculations that clearly show methods and levels of accuracy used, plus notes of how the candidate checked methods, corrected any errors, and made sure that the results made sense.

N2.3   In assessing a candidate's performance in interpreting results and presenting findings, assessors should look for evidence that the candidate can select forms of presentation (a graph, chart and diagram) to effectively match the types of information being presented. Information technology can be used to construct the graph, chart or diagram, providing the candidate can use these to clearly present findings. Methods used must be described and the results of calculations explained in terms of how they meet the purpose of the candidate's activity.

Amplification of application of number unit, level 3, Part A

Part A

WHAT YOU NEED TO KNOW

In planning an activity and interpreting information,
YOU NEED TO KNOW HOW TO:

- plan a substantial and complex activity by breaking it down into a series of tasks;

- obtain relevant information from different sources, including a large data set (over 50 items), and use this to meet the purpose of your activity;

- use estimation to help you plan, multiplying and dividing numbers of any size rounded to one significant figure;

- make accurate and reliable observations over time and use suitable equipment to measure in a variety of appropriate units;

- read and understand scale drawings, graphs, complex tables and charts;

- read and understand ways of writing very large and very small numbers *(eg £1.5 billion, 2.4x10⁻³)*;

- understand and use compound measures *(eg speed in kph, pressures in psi, concentrations in ppm)*;

- choose appropriate methods for obtaining the results you need and justify your choice.

In carrying out calculations,
YOU NEED TO KNOW HOW TO:

- show your methods clearly and work to appropriate levels of accuracy;

- carry out multi-stage calculations with numbers of any size *(eg find the results of growth at 8% over three years, find the volume of water in a swimming pool)*;

- use powers and roots *(eg work out interest on £5,000 at 5% over three years)*;

- work out missing angles and sides in right-angled triangles from known sides and angles;

- work out proportional change *(eg add VAT at 17.5% by multiplying by 1.175)*;

- work out actual measurements from scale drawings *(eg room or site plan, map, workshop drawing)* and scale quantities up and down;

- work with large data sets (over 50 items), using measures of average and range to compare distributions, and estimate mean, median and range of grouped data;

- re-arrange and use formulae, equations and expressions *(eg formulae in spreadsheets, finance, and area and volume calculations)*;

- use checking procedures to identify errors in methods and results.

In interpreting results and presenting your findings,
YOU NEED TO KNOW HOW TO:

- select and use appropriate methods to illustrate findings, show trends and make comparisons;

- examine critically, and justify, your choice of methods;

- construct and label charts, graphs, diagrams and scale drawings using accepted conventions;

- draw appropriate conclusions based on your findings, including how possible sources of error might have affected your results;

- explain how your results relate to the purpose of your activity.

What you need to know –
In planning an activity and interpreting information

- *Plan a substantial and complex activity* Candidates should know how to break down a complex activity into a series of interrelated tasks, and identify the problems to be tackled. It may not be immediately clear what these problems are, and candidates may need to extend their knowledge of methods and approaches. They will need to take time to specify the problem, formulate questions in terms of the data needed, plan how they will obtain this information and what they are going to do (ie methods they will use for organising data, such as tabulating and grouping, types of calculations how they will take account of variability or bias) to meet the purpose of their activity.

- *Obtain information* Candidates should know how to select and use suitable equipment for making accurate measurements and observations, as well as how to interpret a variety of numerical, written and graphical material, including complex tables and charts, ie those that present very detailed information relating to a large data set (over 50 items), in order to make decisions on their relevance to the activity. They should be able to deal with scales, such as 1:1250 (as on large-scale maps), graphs with several graph lines on the same axes (eg power outputs compared with speed for different temperatures, weights against heights for a range of body mass indexes).

- *Compound units* Candidates should know how to interpret compound units, eg those presented as 'something per something' such as milligrams per 100 millilitres (implying a division) or 'something-somethings', such as person-days (implying a multiplication).

- *Choose methods* Candidates should extend their knowledge of methods (eg look up formulae, information relating to similar tasks or problems), weigh up the pros and cons of alternatives and be able to justify their choice in relation to its suitability for their purpose and circumstances.
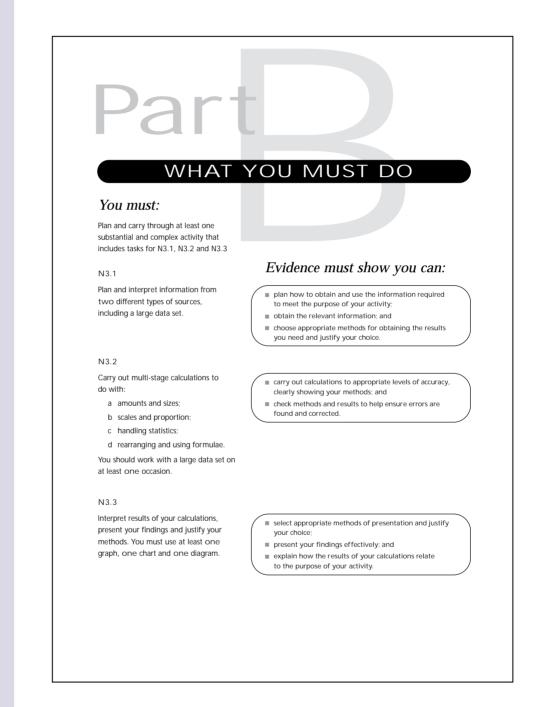
What you need to know – *In carrying out calculations*

- *Carry out multi-stage calculations* Candidates should know how to tackle calculations that involve at least two interrelated stages, ie where the results from one stage are used to provide some of the data for calculations at the next stage, and so on, eg finding the mean time taken by shoppers at checkouts, and using the results, together with data about the number of shoppers in the supermarket, to calculate the number of checkout assistants required at different times of the day (this differs from level 2 in that each stage might include calculations involving two or more steps, eg adding and dividing to find the mean).

  a) *amounts and sizes* eg using powers and roots, such as 'square', 'cube' and 'square root', 10^6, 10^{-3}; finding missing angles and sides, such as when working out the space implications for ramps at different slopes, when it is quicker to use calculations than scale drawings;

  b) *scales and proportion* eg knowing that if land measurements on a plan are doubled, the area of land is four times as much, or if three dimensions of an object are trebled, its volume or weight becomes 27 times as much.

  c) *handling statistics* eg using several methods (visual, such as frequency charts or histograms; numerical, such as calculations of mean, median and range) to compare two or more large sets of data, such as the results of asking 50 people about accidents at work and national statistics on the actual risks.

  d) *rearranging and using formulae* eg solving simultaneous linear equations with two variables, using formulae with letters and rearranging them so as to change the subject (output) of a formula, such as making w or h the subject rather than b in $b = \dfrac{w}{h^2}$ as well as finding the value of w given the values of h and b.

What you need to know – *In interpreting results and presenting findings*

- *Examine critically* Candidates should be able to identify strengths and weaknesses of alternative methods, ie of different types of graph, chart and diagram, in order to decide on the most suitable for the nature of the data they want to present and the noteworthy features they want to highlight. They should be able to give reasons to support their choices.

- *Draw appropriate conclusions* – at this level, not only do conclusions need to be supported by evidence, but there needs to be an assessment of the likely accuracy or dependability of the results, taking into account approximations in calculations and possible inaccuracies in the original information.

Guidance on internal assessment for application of number, level 3, Part B

Part B

WHAT YOU MUST DO

You must:

Plan and carry through at least one substantial and complex activity that includes tasks for N3.1, N3.2 and N3.3

N3.1

Plan and interpret information from two different types of sources, including a large data set.

Evidence must show you can:

- plan how to obtain and use the information required to meet the purpose of your activity;
- obtain the relevant information; and
- choose appropriate methods for obtaining the results you need and justify your choice.

N3.2

Carry out multi-stage calculations to do with:

   a amounts and sizes;

   b scales and proportion;

   c handling statistics;

   d rearranging and using formulae.

You should work with a large data set on at least one occasion.

- carry out calculations to appropriate levels of accuracy, clearly showing your methods; and
- check methods and results to help ensure errors are found and corrected.

N3.3

Interpret results of your calculations, present your findings and justify your methods. You must use at least one graph, one chart and one diagram.

- select appropriate methods of presentation and justify your choice;
- present your findings effectively; and
- explain how the results of your calculations relate to the purpose of your activity.

At level 3, candidates are expected to demonstrate their skills in the context of at least one substantial and complex activity that can be broken down into a series of interrelated tasks covering all three components of the unit, ie candidates are expected to plan and use information (obtained in N3.1) in carrying out multi-stage calculations (for N3.2), and go on to interpret the results of these calculations in the context of presenting findings (N3.3).

Multi-stage calculations can include calculations from one or more category (eg costing the decoration of a room could involve use of scales and proportion, dealing with amounts and sizes and use of formulae). In some contexts, it may not be possible to find one natural activity that can provide opportunities for all four types of calculations. In such cases, candidates should undertake another activity that requires them to meet the assessment criteria for N3.1 and N3.3, as well as N3.2. Use of the two sources and forms of presenting findings could be split between the two different activities. However, for Part B, all calculations must be clearly set in context and not be stand-alone exercises. Evidence does not have to cover all the items described in Part A, but must meet all the assessment criteria (in the relevant box) for each component of Part B. Candidates must show they are clear about the purpose of each activity.

Guidance should be given to candidates on the types of activity that will provide sufficient scope for covering all aspects of Part B, but candidates must plan the activity and both identify and carry out the tasks for themselves. The activity from which evidence is taken must be complex, requiring candidates to consider carefully the nature and sequence of tasks when planning how to obtain and use information to meet their purpose.

N3.1   In assessing a candidate's performance in planning and interpreting information, assessors should look for evidence of information obtained from two different types of source, including a large data set (over 50 items). These sources could include graphical or written material, and/or direct measurements or observations, depending on the context in which the candidate is working. Evidence of planning must include a clear description of the activity, and its purpose, details of how the candidate expects to obtain relevant information, and a clear sequence of tasks showing how she or he intends to use this information, Assessors should look for evidence that the candidate can obtain information and, not only choose for her or himself appropriate methods for getting the results needed, but also justify these choices.

N3.2   Assessors should look for examples of calculations that involve at least two stages, ie where the results from one stage are used to provide some data for calculations at the next stage. The stages can involve calculations from any of the four categories. Overall, candidates must provide at least one example of calculations from each category, including work with a large data set (over 50 items). Evidence must show clearly methods and levels of accuracy used in making calculations, plus details of how the candidate has checked methods and results, and made any corrections.

N3.3   In assessing the candidate's performance, assessors should look for evidence that she or he can both select and justify methods of presentation and present findings effectively using forms (at least one graph, one chart and one diagram) that are appropriate to the nature of the data being presented. Examples could include a graph with several graph lines on the same axis, a flow chart, bar chart, pie chart, histogram, frequency polygon, scatter diagram, network diagram, scale drawing. If IT is used to produce these, it is essential that the candiate checks their accuracy and fully explains them. Methods must be described and the results of calculations explained in terms of how they meet the purpose of the candidate's activity.

Examples

N3.3:
presenting findings using a scale drawing (eg showing the lay-out of a work-space), a pie chart illustrating types of accident in the workplace and a graph (eg to show the relationship between local and national statistics on accidents at work).

Information technology units, levels 1–3

Introduction

The aim of the information technology units is to encourage candidates to develop and demonstrate their skills in using IT for finding, exploring, developing and presenting information (text, images and numbers). The units are essentially concerned with developing and recognising the ability of candidates to *select* and *apply* IT skills in ways that are appropriate to their particular context. However, they can also be used to help individuals to make connections with less familiar contexts and develop their ability to progress to higher levels of competence.

Techniques when using software, are essential, but so too are the skills of application, such as making decisions about the relevance of information and the quality of work. Techniques and skills of application both contribute to understanding a task or problem and to deciding on the best course of action. The units do not stipulate particular hardware or software packages, but it is assumed that candidates will be working with equipment and software that are appropriate to their work, study or other activities.

Progression from levels 1 to 3

The key skills units are designed to recognise candidates' progression in terms of both techniques and skills of application.

At level 1 candidates are required to handle simple numerical, textual and graphical information in the context of short, straightforward activities, using basic techniques. There is no requirement at level 1 to combine information, or for candidates to use spreadsheets when manipulating numerical information – there are many software applications that manipulate numbers. Candidates should know how to use technology safely, care for equipment, and avoid losing data. They should also know whom to turn to if things go wrong.

At level 2 candidates are required to carry out effective searches and derive new information. They must also present combined information, such as text with images or numbers, in a consistent way. Activities require a greater range of techniques, and more steps, than at level 1. Candidates can be expected to be able to enter formulae when using appropriate software (eg spreadsheet, stock control, accounting) to generate simple calculations such as totals. They need to know of the benefits and disadvantages of using IT, the observance of copyright laws, and health and safety risks. They should be able to spot errors and their causes and be aware of ways of reducing the risk of viruses.

At level 3 there is an increase in the complexity of activities and techniques required, such as the ability to create structures and procedures for developing text, images and numbers. Candidates are required to plan and carry through at least one substantial activity. They must know how to manage their work, and the technology and software they are using. This includes observing laws of copyright and rules of confidentiality; safe working and avoiding loss of information; identifying errors and minimising risks. Candidates need to be aware of the wider implications of using IT. The focus is on a critical approach, requiring candidates to make judgements on their work, in terms of speed, ease of use, effort and accuracy, and compare their use of IT against other systems and manual methods.

Amplification of information technology unit, level 1, Part A

Part A

WHAT YOU NEED TO KNOW

In finding and developing information,
YOU NEED TO KNOW HOW TO:

- find different types of information *(eg text, images, numbers)* from IT sources *(eg files, CD-ROM)* and non-IT sources *(eg hand-written notes, price lists, diagrams)*;

- decide what information is relevant for your purpose *(eg to answer questions from a customer, write a report, help solve a problem, make something)*;

- enter and bring in information *(eg copy and paste text, import clip-art images)*, using formats that help development *(eg consistent use of spaces, tabs and returns, format of numbers, graphic features such as line thickness and shading)*;

- explore information *(eg ask the right questions to find things out, try out alternatives)*;

- develop information in the form of text, images and numbers *(eg organise information, carry out calculations)*.

In presenting information,
YOU NEED TO KNOW HOW TO:

- use appropriate layouts for presenting different types of information, including text, images and numbers *(eg select screen displays or pages for different types of document, such as letters or invoices)*;

- present information in a consistent way *(eg fonts, bullet and number lists, alignments, size and position of images, tables of numbers)*;

- develop the presentation to meet your purpose *(eg organise the presentation by moving, copying, deleting and inserting information)*;

- make sure your work is accurate and clear *(eg check content is relevant, proof-read, use a spell-checker, ask others, select and highlight information to improve its clarity)*;

- save information so it can be found easily *(eg use suitable folders/directories, filenames)*.

You will also need to know how IT can help you in your work and be able to compare your use of IT with other methods.

It is important that you can work safely and take care of equipment, avoid losing information and know how to get help when dealing with errors.

General guidance on use of IT

Time should be spent with candidates discussing the pros and cons of using information technology for various tasks and operations, and health and safety issues. Candidates should be aware of, and observe, safety requirements of the equipment they are working with. This includes safe working periods with VDUs, using equipment for an appropriate purpose, and correct procedures when closing down programs (where they exist).
At this level, candidates are not expected to deal with equipment failures or significant errors, but should know where to turn for help and understand the importance of reporting problems immediately. Candidates should know how to use help facilities such as help screens and wizard facilities, to learn new things and overcome difficulties.
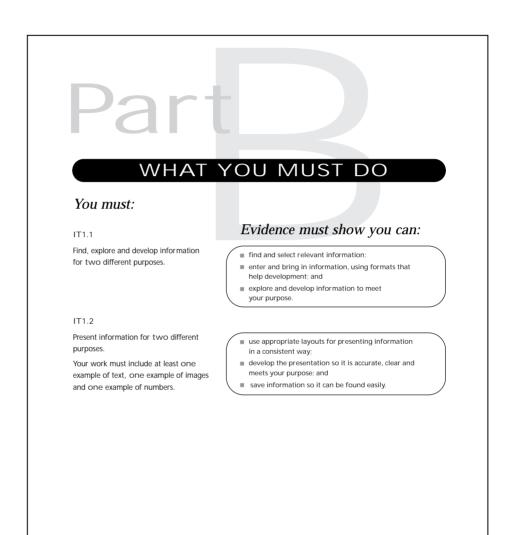
What you need to know – *In finding and developing information*

- *Find* Candidates should know how to find information that might be relevant for a particular purpose, including electronically stored information. Techniques, such as basic key word and 'wild-card' search facilities, may be employed when searching for files, and 'find and replace' for faster editing. It is important that candidates should be able to confirm the purpose of the work in hand and then identify which sources and types of information are relevant to it.

- *Enter* Candidates should know how to enter text and numbers and be able to copy text, images and numbers. They should be aware of methods that help subsequent processing, such as consistent use of tabs and spaces between paragraphs and minimal use of spaces and enter key.

- *Bringing information in* Candidates should know how to import information or images, eg by using a scanner, by copying from a disc or CD-ROM, or by cutting and pasting.

- *Formats* It is acceptable for candidates to make use of design templates and style sheets (eg when wordprocessing a letter), and to use fixed tab settings. They do not need to know how to alter tab settings at this level.

- *Explore* Candidates should be encouraged to try out various techniques, facilities and approaches. They should know how to check information as they go along, in order to select useful material and decide whether to change direction or look for alternative sources. When using software applications, candidates should be prepared to look for and try alternative approaches.

- *Develop* Having explored various sources of information and possible ways of processing it, candidates should know how to develop text, numbers or images, as needed. For example, they should know how to change the format of their work (eg size of text, size of image, place a border around work), how to change the way text is organised (eg by moving, copying, deleting, inserting) and how to do calculations by using software that can process numbers (eg obtain totals).

What you need to know – *In presenting information*

- *Layouts* Candidates should know how to select and carry out work using supplied layouts (eg business letter, invoice). They should be aware of the advantages and disadvantages of using different formats for presenting information, on screen as well as on paper (eg portrait and landscape orientation, A4 paper size).

- *Presentation* Candidates should know how make the style of presentation consistent so that people using it will find it clear and easy to follow (eg font sizes, alignments). They should know how to edit their work to ensure that it is accurate and fit for its purpose, eg by using spell-checker, proofreading, asking others.

- Save Candidates should know how to save their work in ways that make it easy to retrieve later. This requires use of suitable file names (eg those which give an idea of content, ownership, sequence) and placing information in, and retrieving information from, appropriate folders/directories.

Guidance on internal assessment for information technology, level 1, Part B

Examples

IT1.1:

using IT to explore travel options and develop a plan; find information to help answer a query from a customer and draft a response; research a topic for a project and develop ideas.

IT1.2:

a letter transcribed from handwritten to wordprocessed form; an image scanned at a suitable resolution, sized and cropped, for a workplace notice; an invoice; an invitation to an event.

Part B

WHAT YOU MUST DO

You must:

IT1.1

Find, explore and develop information for two different purposes.

IT1.2

Present information for two different purposes.

Your work must include at least one example of text, one example of images and one example of numbers.

Evidence must show you can:

- find and select relevant information;
- enter and bring in information, using formats that help development; and
- explore and develop information to meet your purpose.

- use appropriate layouts for presenting information in a consistent way;
- develop the presentation so it is accurate, clear and meets your purpose; and
- save information so it can be found easily.

At level 1, subject matter and materials will be those commonly met in the context in which the candidates are working or studying, and tasks will be of a straight-forward nature. Assessors and candidates need to be aware that evidence is required that shows the processes the candidate has used, not just final products. Components 1.1 and 1.2 do not need to be related to the same purpose, but work must be clearly set in context and not be stand-alone exercises.

Evidence does not have to cover all the items described in Part A, but it must meet *all* the assessment criteria (in the relevant box) for each component of Part B. Candidates must show they are clear about their purposes for using IT. Separate tasks should be undertaken for each purpose, to provide sufficient evidence for assessors to judge the candidate's performance in using IT.

IT1.1   The candidate is required to use IT for two different purposes. For *each* purpose, assessors should look for evidence that the candidate can find and select relevant information and that he or she can enter and bring in information, using appropriate formats, and explore and develop the work. Annotated drafts of work, or records of observed screen-displays, are helpful in showing this process.

IT1.2   The candidate must use IT to present information for two different purposes. For *each* purpose, assessors should look for evidence that the candidate can use an appropriate layout to ensure that information is presented in a consistent way (eg consistent use of tabs and spacing between paragraphs), can develop the presentation so that it is accurate and clear, and can save work so that it can be found easily.

At this level, text, images and numbers do not have to be combined in one piece of work; the candidate can produce separate examples. Evidence could include notes or highlighted key points in the final text, print-outs or authenticated records of screen displays, and drafts to show the development of the presentation.

Amplification of information technology unit, level 2, Part A

Part A

WHAT YOU NEED TO KNOW

In searching for and selecting information,

YOU NEED TO KNOW HOW TO:

- identify suitable sources of information *(eg hand-written documents, material to be scanned, files on disks, CD-ROMs, databases, the internet)*;
- search for information using multiple criteria *(eg operators such as 'and', 'greater than' and tools such as search engines)*;
- interpret information and decide what is relevant to your purpose *(eg to respond to an enquiry, write a project report, help solve a problem, design or make something)*.

In developing information,

YOU NEED TO KNOW HOW TO:

- enter and bring together information *(eg 'copy and paste' or import text, images, numbers)*, using formats that help development *(eg using tabs rather than spaces to align text, using tables or frames to position information)*;
- explore information as needed for your purpose *(eg follow lines of enquiry, explore the effects of changing information in a spreadsheet model to make and test predictions)*;
- develop information in the form of text, images and numbers *(eg link information, organise information under headings, restructure tables, generate charts and graphs from data, select records or fields and prepare reports from a database)*;

- derive new information *(eg compare information from different sources to reach a conclusion, use formulae to calculate information such as a total or average)*.

In presenting information,

YOU NEED TO KNOW HOW TO:

- select and use appropriate layouts for presenting combined information, *(eg document structures such as margins, columns and headings, borders for images and text, record structures, tables, spreadsheets)*;
- present information in a consistent way, *(eg paragraph layouts, sizes and styles of images and text, alignments, fonts)*;
- develop the presentation to suit your purpose and types of information, including text, images and numbers, *(eg highlight information to improve its impact, refine layouts, make sure it suits the needs of your audience)*;
- ensure your work is accurate and clear *(eg proof-read, use a spell-checker, seek the views of others)* and is saved appropriately *(eg use suitable folders/directories and file names, avoid loss)*.

You will also need to know: the benefits and disadvantages of using IT; when it is necessary to observe copyright or confidentiality; how to identify errors and their causes and minimise risks from viruses; and how to work safely and minimise health risks.

General guidance on use of IT

Time should be spent with candidates discussing when it is appropriate to use IT as a resource in handling information, and health and safety issues. Candidates should be aware of, and observe, safety requirements of the equipment they are working with. This includes safe working periods with VDUs, using equipment for a purpose, and correct procedures when closing down programs where they exist. They should know how to identify errors in hardware and software they are using and procedures for reporting them. They should know how to minimise the risk from viruses. Candidates should be aware of the consequences of copyright restrictions, and deal with these in an appropriate way. They should know how to handle confidential material.

What you need to know – *In searching for and selecting information*

- *Information sources* Candidates should be able to think ahead about the information they need for a specific purpose, eg to respond to an enquiry, tackle a problem or get ideas for a design, and identify where they might obtain this information. Where possible, access to the internet should be made available.

- *Search* Candidates should know how to conduct appropriate searches, depending on the type and location of the information. They should be capable of using multiple criteria. For example, when interrogating a database, they should know how to refine a search using two or more criteria (eg all males over the age of 65).

- *Interpret* Candidates should know how to read and understand different types of information (numerical data, images such as graphs and charts, text, such as letters, reports), so they can spot possible error or bias, and check facts, in making judgements on whether information suits their purpose.

What you need to know – *In developing information*

- *Formats* Candidates should know how to use formats that are helpful in handling information that has been entered, or imported from other sources. For example, they should know how to lay out text using tabulation, justification, spacing and supplied styles, incorporate images into frames and put data into tables or columns, so as to make future editing of information as straightforward as possible.

- *Explore* Candidates should be encouraged to check information they have entered and brought together, and go further in investigating their area of interest (eg follow up references from initial searches to extend their knowledge of a subject, try out design ideas or test alternative options for solving a problem), to ensure they have enough information and ideas to move on to the next stage.

- *Develop/derive new information* Candidates should know how to use appropriate software features for editing and changing the way information is organised. The processing of data will generate new information, such as totals, page references and indexes. Candidates should be able to further their purpose, eg use formulae for making calculations, draw their own conclusions.

What you need to know – *In presenting information*

- *Layouts* Candidates should know how to select and use layouts that are suitable for presenting combined information, including the basic conventions applied to commonly used documents (eg letters, spreadsheets, tables). They should know how to use headings, margins, columns, tables and borders for presenting text and images, and formatted spreadsheets for presenting numerical data.

- *Presentation* Candidates should know the importance of checking that their work is presented in a consistent way and both accurate and clear. In developing their presentation, they should be familiar with techniques that improve the look of material, such as highlighting. They should know how to save their work in ways that make it easy to retrieve, eg by using suitable file names (so as to give an idea of content, ownership or sequence) and appropriate folders or directories.

Guidance on internal assessment for information technology, level 2, Part B

Part B

WHAT YOU MUST DO

You must:

IT2.1

Search for and select information for two different purposes.

Evidence must show you can:

- identify the information you need and suitable sources;
- carry out effective searches; and
- select information that is relevant to your purpose.

IT2.2

Explore and develop information, and derive new information, for two different purposes.

- enter and bring together information using formats that help development;
- explore information as needed for your purpose; and
- develop information and derive new information as appropriate.

IT2.3

Present combined information for two different purposes.

Your work must include at least one example of text, one example of images and one example of numbers.

- select and use appropriate layouts for presenting combined information in a consistent way;
- develop the presentation to suit your purpose and the types of information; and
- ensure your work is accurate, clear and saved appropriately.

At level 2, subject matter and materials should be those that are commonly met in the context in which candidates are working or studying, and tasks should be of a straightforward nature. Evidence is required that shows the processes the candidate has used in selecting, exploring and developing information, not just the final products. In building on skills at level 1, candidates should be able to derive new information from these processes, as well as use multiple criteria in searching for information, and present combined information in a consistent way.

Candidates will need to be clear about their purposes for using IT. Separate tasks should be undertaken for each purpose, to provide sufficient evidence for assessors to judge the candidate's performance in using IT. It is not necessary for components 2.1, 2.2 and 2.3 to be related to the same purpose, although this may be helpful. The use of IT must be clearly set in context and not consist of stand-alone exercises.

IT2.1   For *each* of the two purposes, the candidate must identify suitable sources of information and show that she or he can search for and select relevant information. Assessors should look for evidence (either through observing the candidate or by looking at search records) that the candidate can use multiple criteria for making searches. The relationship between the information selected and purpose should be clear. The sources used should be noted, along with the scope and nature of the searches, and their outcomes.

IT2.2   For *each* of the two purposes, the candidate must show that she or he can enter and bring together information, explore and develop information, and derive new information. In particular, assessors should look for evidence (eg annotated drafts, answers to questions) that the candidate has entered text and numbers consistently and used formats such as styles that have assisted the subsequent development of information, and has added some new information of her or his own to that obtained from other sources.

IT2.3   For *each* of the two purposes, the candidate must show she or he can select and use an appropriate layout for presenting combined information in an integral way, such as text with images or numbers, images and numbers, or all three types together. Assessors should look for evidence of how the candidate has developed the presentation and its suitability for the purpose and the types of information used. The final work must be accurate, clear and saved appropriately.

Amplification of information technology unit, level 3, Part A

Part A

WHAT YOU NEED TO KNOW

In planning and selecting information,

YOU NEED TO KNOW HOW TO:

■ plan a substantial activity by breaking it down into a series of tasks;

■ compare the advantages and limitations of different sources of information *(eg databases, the internet, material to be scanned, files on disk, CD-ROMs)* and select those suitable for your purpose *(eg to obtain views of others, to produce financial data, product information or a multi-media presentation)*;

■ choose appropriate techniques for finding information *(eg database query techniques, internet search engines, multiple criteria including relational operators such as less than/greater than, and logical criteria such as AND/OR/NOT conditions)* and use them to carry out effective searches;

■ make selections based on relevance to your purpose and judgements on quality *(eg your own and others' views on accuracy and reliability of content)*.

In developing information,

YOU NEED TO KNOW HOW TO:

■ enter and bring together information in a consistent form *(eg lists, tables, frames, types of images)* and use automated routines *(eg macros, icons, database query and report routines, validation for database entries)*;

■ create and use structures and procedures for developing text, images and numbers *(eg sort and group information, use mail-merge, analyse and interpret numerical data using spreadsheet software, generate graphs and charts)*;

■ explore information *(eg design and develop lines of enquiry, change values and rules in a model to make predictions and test hypotheses)*;

■ derive new information *(eg evaluate information from different sources to reach and justify a conclusion, use facilities to calculate or deduce results)*;

■ use methods of exchanging information to support your purpose *(eg e-mail, shared access to documents, collaborative development of information)*.

In presenting information,

YOU NEED TO KNOW HOW TO:

■ develop the structure of your presentation *(eg modify templates and paragraph styles, apply automatic referencing facilities such as page numbers, dates and file names)*, and use the views of others to guide refinements *(eg obtain feedback on content, layout, format, style)*;

■ develop and refine the presentation of text, images and numbers *(eg improve impact by changing format or layout, combine information, overlay images on text)*;

■ present information so that it meets your purpose and the needs of the audience *(eg compare paper based, single form, mixed form and multi-media presentations and choose the most suitable one available)*;

■ ensure work is accurate and makes sense *(eg proof-read, use a spell-checker, seek the views of others)*.

You will also need to know: the implications of using IT, comparing your use of IT with systems used elsewhere; when it is necessary to observe copyright or confidentiality; how to save your work for easy retrieval, for managing versions and to avoid loss; how to identify errors and their causes and minimise risks from viruses; and how to work safely and minimise health risks.

General guidance on use of IT

Candidates should know when it is appropriate to use IT, in terms of its effects on their own work and that of others, by comparing their use of IT with other systems. They should observe copyright and confidentiality, and know how to identify errors and their causes. They should know how to minimise the risk of information loss (saving files and backing up), including how to protect against viruses. Candidates should observe safety requirements, including safe working periods with VDUs, and correct procedures for using equipment and when closing down programs.

What you need to know – *In planning and selecting information*

- *Substantial activity* Candidates should know how to plan and carry through a fairly large-scale activity by breaking it down into a series of tasks, relating to planning information retrieval, processing information, and presenting outcomes.

- *Purpose* Candidates should be familiar with using different sources of information, including databases and the internet, in order to be able to compare the pros and cons of each source (eg in terms of ease of use, speed, likelihood of finding relevant information) and make judgements about their suitability for specific purposes.

- *Techniques for finding information* Candidates should know how to use a search engine, and multiple criteria, for carrying out internet and database searches. It may not always be possible, or appropriate, to explore the internet using more advanced search features, such as those incorporating the use of relational operators (less than, greater than) and logical criteria (AND, OR, NOT) However, candidates need to be familiar with them.

What you need to know – *In developing information*

- *Automated routines* Candidates should know how to enhance the processing of information using automated routines such as macros, database query and report routines, and the validation of database entries. The level of sophistication can vary enormously, according to needs and contexts, but the key aspect is a capacity to drive software. Candidates should have experience of customising these applications and appropriate routines.

- *Structures* Candidates should know how to create and adapt structures for the development of text, numbers and images. For example, when preparing text for printing, candidates should know about templates and paragraph styles and be able to restructure and, if necessary, re-create them. They should be able to set up mail merges and simple database structures. In using spreadsheets, they should know how to incorporate multiple and linked calculations (eg use of relative and absolute referencing, IF/THEN conditions, lookup tables).

- *Explore and derive information* Candidates should know how to optimise their use of IT to assist them in designing and following lines of enquiry and to help them tackle problems, eg how to set up a break even investigation. Examples of new information, appropriate to this level, include synthesising information from different sources, using formulae and logical relationships to obtain meaning from numerical data, generating new views from 3D objects.

- *Exchange* In the course of developing information for specific purposes, candidates should know how to conduct exchanges with others, using facilities such as e-mail and shared access to documents, and engage in collaborative development of information.

What you need to know – *In presenting information*

- *Develop and refine* Candidates should know how to modify structures, such as templates and paragraph styles, and use automatic referencing systems, but should also be able to use the views of other people in making improvements to the format and style of materials.

- *Present* Candidates should take into account the needs of their audience in terms of type of presentation (paper-based, single electronic form or multi-media), as well as the accuracy, clarity and appropriateness of content, and the purpose of the presentation.

Guidance on internal assessment for information technology, level 3, Part B

Part B

WHAT YOU MUST DO

You must:

Plan and carry through at least one substantial activity that includes tasks for IT3.1, IT3.2 and IT3.3.

IT3.1

Plan and use different sources to search for, and select, information required for two different purposes.

IT3.2

Explore, develop and exchange information, and derive new information, to meet two different purposes.

IT3.3

Present information from different sources for two different purposes and audiences.

Your work must include at least one example of text, one example of images and one example of numbers.

Evidence must show you can:

- plan how to obtain and use the information required to meet the purpose of your activity;
- choose appropriate sources and techniques for finding information and carry out effective searches; and
- make selections based on judgements of relevance and quality.

- enter and bring together information in a consistent form, using automated routines where appropriate;
- create and use appropriate structures and procedures to explore and develop information and derive new information; and
- use effective methods of exchanging information to support your purpose.

- develop the structure and content of your presentation using the views of others, where appropriate, to guide refinements;
- present information effectively, using a format and style that suits your purpose and audience; and
- ensure your work is accurate and makes sense.

At least one substantial activity must be planned and carried through to meet all the assessment criteria for IT3.1, IT3.2 and IT3.3. Candidates are expected to obtain information from different sources (for IT3.1), process this information and add to it (for IT3.2), and then go on to present outcomes (for IT 3.3). However, in many cases it may not be possible to find one natural activity that covers two purposes, two audiences (for IT3.3) and all three forms of presenting work (for IT3.3). In such cases, one or more additional activities should be undertaken to meet the requirements of the relevant component(s). Together these must cover the remaining purpose, audience and/or form(s) of presenting work. These additional activities can each be organised to cover one or more of the components.

Use of IT must be clearly set in context and not be stand-alone exercises. Candidates must be clear about the purpose of each activity. Evidence does not have to cover all the items described in Part A, but must meet all the assessment criteria (in the relevant box) for each component of Part B. Guidance should be given to candidates on the types of activities that will provide sufficient scope for covering all aspects of Part B, but they must both identify and carry out the tasks for themselves. In working collaboratively with others, evidence must make clear the individual candidate's contribution.

IT3.1   Assessors should look for evidence of a clear planning process, followed by appropriate and effective searches for finding and selecting relevant information from IT and other sources. Overall, evidence of at least one example of using IT to carry out effective searches (eg using the internet or a database) should be provided. The relationship between the information and the purpose should be clear. Sources must be named and records made of the scope and nature of the searches (eg records from observing the candidate, notes or print-outs), with an assessment of the relevance and quality of the information gained (eg annotated print-outs, copies of source material, recorded answers to questions).

IT3.2   At level 3, the candidate is expected to demonstrate some control of automated routines, which assist the process of developing information, when bringing together items from different sources (which may include text, images and/or numbers). Assessors should look for evidence that the candidate can create appropriate procedures and structures for exploring and developing information, and deriving new information. In any one activity, the use of procedures and structures may vary in terms of the relative emphasis given to the three aspects of information handling, for example there may be more emphasis on developing or deriving new information than exploring information. Overall, evidence of at least one example of using IT to exchange information must be provided, for example the collaborative development of information. Different forms of exchange are acceptable in undertaking other activities, where candidates have limited opportunities for using IT for this purpose (eg paper-based exchange with a member of staff peer, customer). Records of the exchange should be available (eg copies of earlier versions of work, annotated to show individual contributions).

IT3.3   The candidate must show that she or he can develop the structure and content of the presentation in consultation with others (eg provide copies of working drafts or records of screen displays, with notes showing where work was refined in respose to advice from others), as well as present information in a way that is appropriate to its purposes and audience. The audience could be a peer group, line manager or a tutor. At least one example of text, graphics and numbers must be presented. Text styles should be applied systematically. Assessors should look for evidence that the candidate has checked the work for both accuracy and sense.

Relevant sources of information

England

The Qualifications and Curriculum Authority (QCA) Tel. 020 709 5555; Internet: *http://www.qca.org.uk/keyskills*

Department for Education and Employment (DfEE) Tel. 0114 259 3533; Internet: *http://www.open.gov.uk/dfee/key*

Information about Progress File can be obtained from: *http://www.dfee.gov.uk/progfile/index.htm*

The Key Skills Support Programme (funded by DfEE and co-ordinated by FEDA and Learning for Work) aims to:

■ raise awareness and understanding of key skills;

■ provide advice and models of how to organise key skills delivery;

■ provide materials on how to develop and assess key skills;

■ provide training through conferences, workshops and courses.

FEDA website: *http://www.feda.ac.uk*

Helpline (for schools and colleges): Tel. 0207 9621066

Learning for Work website: *http://www.kssp.net*

Helpline (for employers and training providers): Tel. 01189 316 326

Wales

The Qualifications, Curriculum and Assessment Authority for Wales (ACCAC) Tel. 02920 375400; Internet: *http://www.accac.org.uk*

The National Assembly Education Department (NAED) Tel. 02920 826018

Northern Ireland

Northern Ireland Council for the Curriculum, Examinations and Assessment (NICCEA) Tel. 028 9026 1200 Internet: *http://www.ccea.org.uk*

Department of Education (DE) Tel. 028 9127 9734

Key Skills Resource Centres: Belfast: Tel. 028 9026 5223; Dungannon: Tel. 028 8772 6035; Londonderry: Tel. 028 7134 7493

Department of Higher and Further Education, Training and Employment (DHFETE). Tel. 028 9025 7438

QCA Northern Ireland Office Tel. 01232 330706

KEY SKILLS AWARDING BODIES

List available on QCA website *http://www.qca.org.uk/keyskills*

OTHER RELEVANT PUBLICATIONS

Key Skills explained, DfEE Publications, Tel. 0845 60 222 60 (ref. KS13)

Guidance in using the key skills units from QCA Publications, Tel. 01787 884444:

Levels 1–3, working with others, improving own learning and performance, and problem solving (QCA/99/482)

Levels 4 and 5 (QCA/99/483).

Key skills units from QCA Publications, Tel. 01787 884444 (and on QCA website):

Levels 1–3, communication, application of number and information technology (QCA/99/342)

Levels 1–3, working with others, improving own learning and performance and problem solving (QCA/99/437)

Levels 4 and 5 (QCA/99/455).

The units are for use in programmes starting from September 2000.