

EDEXCEL INTERNATIONAL GCSE (9-1)

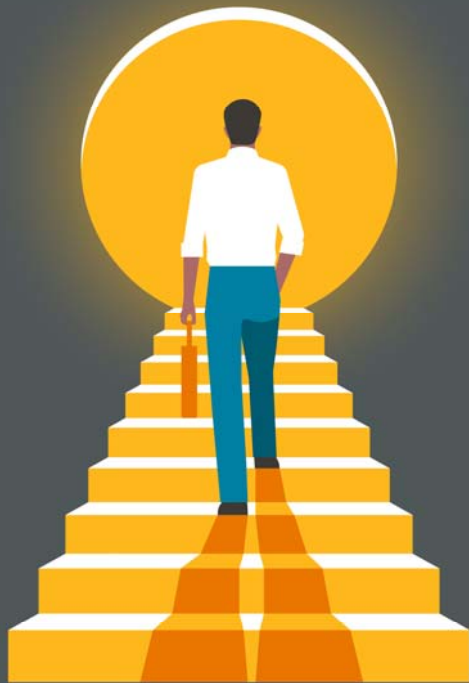
4IT1 – Information and Communication Technology

GETTING READY TO TEACH

Event code: 17OAN03

First teaching in 2017, first assessment in 2019.





Aims and Objectives

- Consider the structure, content and assessment of this qualification
- Learn about the new 9–1 grading scale
- Consider the key changes from 4IT0
- Explore possible teaching and delivery strategies for the new qualification

Session Agenda

Timings are approximate and are given from the start of the 2 hour session

- 00:00 Welcome and Introduction
- 00:05 Introduction to the new specification
- 00:30 A closer look at the theory section of the specification
- 01:00 A closer look at the practical section of the specification
- 01:25 Practical examination issues
- 01:35 Sharing good practice
- 02:00 Finish

Introduction to the Assessment

Content

Paper 1:

Topic 1: Digital Devices

Topic 2: Connectivity

Topic 3: Operating Online

Topic 4: Online Goods and Services.

Paper 2:

Topic 5: Applying Information and Communication Technology

Topic 6: Software Skills

Assessment Objectives / Skills Tested

Students will be required to:

- ❖ demonstrate knowledge and understanding of Information and Communication Technology
- ❖ apply knowledge and understanding to produce ICT-based solutions
- ❖ analyse and evaluate, make reasoned judgements and present conclusions

Structure of Assessment

Availability annually in May/June
First assessment: 2019

Two papers – each 100 marks

Paper 1: theory

- ❖ written
- ❖ 90 minutes
- ❖ mixture of multi-choice, short and long answer questions

Paper 2: practical

- ❖ computer based
- ❖ 180 minutes
- ❖ two practical assignments

Qualification aims and objectives

The qualification is designed to enable students to

- ❖ explore how digital technology impacts on the lives of individuals, organisations and society
- ❖ learn about current and emerging digital technologies and the issues raised by their use in a range of contexts by individuals and organisations
- ❖ develop awareness of the risks that are inherent in using ICT and the features of safe, secure and responsible practice
- ❖ broaden and enhance their ICT skills and capability
- ❖ work with a range of digital tools and techniques to produce effective ICT solutions in a range of contexts
- ❖ learn how to reflect critically on their own and others' use of ICT and how to adopt safe, secure and responsible practice.

Why Pearson Edexcel International GCSE in ICT

Pearson has listened to feedback on the 2009 specification.

- ❖ Changes have been made that will engage students and give them skills that will support progression
- ❖ ICT and Computer Science are unique and complementary subjects serving differing purposes and meeting different needs. Both can be taken in combination.

The content and assessment approach for ICT has been designed to:

- ❖ develop confident and competent users
- ❖ provide students with relevant and transferable skills
- ❖ provide clear and straightforward question papers
- ❖ allow broad and deep development of students' skills
- ❖ enable successful progression to advanced level courses

Key features of the qualification

- ❖ Up to date content
- ❖ Topics which prepare students for the digital world
- ❖ Provides a pathway for Level 3 qualifications
- ❖ All assessment externally assessed
- ❖ Written theory examination and computer-based practical examination
- ❖ Week long window for 3 hour practical examination so that centres can schedule for convenience

What's new?

- ❖ 4IT1 replaces 4IT0
- ❖ The content reflects contemporary views of the nature of ICT
- ❖ There are no substantial changes although the format looks different
- ❖ Fundamental aims and objectives remain the same
- ❖ Content has been updated but the assessment approach is very similar
- ❖ Content has been reorganised and made more explicit

What's new?

- ❖ The 9-1 grading system has been introduced to ensure comparability with GCSE qualifications and allow greater discrimination
- ❖ The weighting of AO1 (knowledge and understanding) has been reduced slightly and AO3 (Analysis and evaluation) has been increased slightly
- ❖ Multiple choice questions do not appear as a separate section in Paper 1 but are used where they are most appropriate within the paper
- ❖ The structure of the practical examination has been amended to include two compulsory sections but the same software applications are covered

9-1 grading system

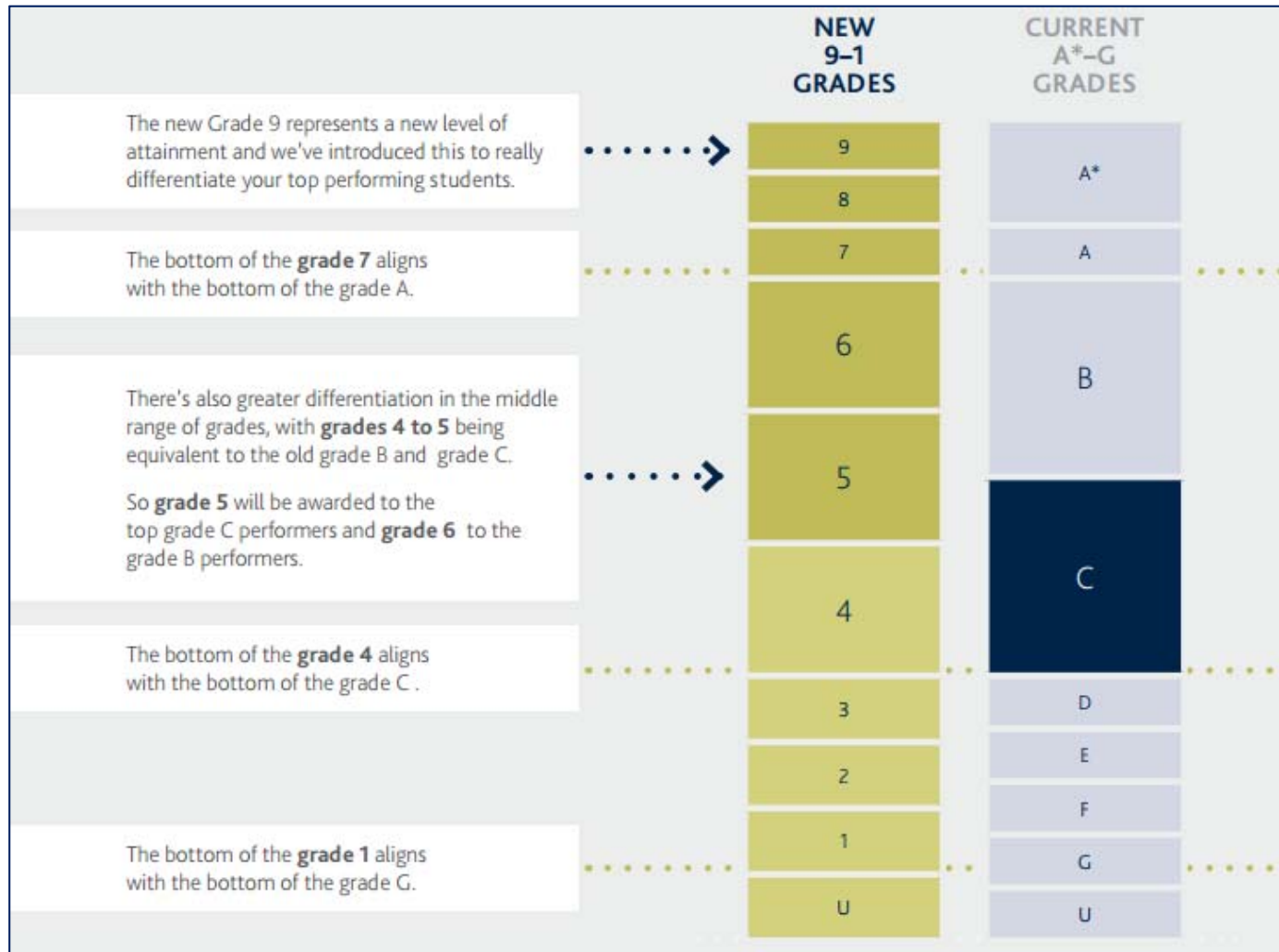
❖ **Awarding**

- ❖ The grading system is changing but our commitment to awarding grades that accurately reflect learner exam performance remains the same.
- ❖ We set new grade boundaries (minimum number of marks needed to achieve each grade) for each assessment of each qualification.

❖ **Benefits**

- ❖ Greater differentiation across levels of attainment e.g. 2 grades where the current C grade is
- ❖ Rewards truly outstanding achievement with the grade 9
- ❖ Provides more information about student attainment to help progression to A Level
- ❖ Same scale for Pearson Edexcel GCSE and International GCSE allows clear comparison with English standards, unlike old A* to G grading

9-1 grading system



**A closer look at the theory
section of the specification**

The theory – content

Students must study **all** the following topics:

- ❖ Topic 1: Digital devices
 - ❖ Topic 2: Connectivity
 - ❖ Topic 3: Operating online
 - ❖ Topic 4: Online goods and services
-
- ❖ Most of the content from the previous specification is still present within the new specification
 - ❖ The new specification better clarifies the depth and breadth of knowledge and understanding required

New content

2.2 Factors influencing the choice of digital communication in a network	2.2.1 Understand factors influencing the speed and volume of data transfer. 2.2.2 Understand the benefits and drawbacks of wired versus wireless communication in local networks. 2.2.3 Understand the significance of bandwidth and latency, and their impact on the 'user experience'. 2.2.4 Understand the features of broadband, mobile broadband and cellular networks.
4.3 Online software	4.3.1 Understand the impact of cloud-based services: hosted applications, storage. 4.3.2 Understand the features and characteristics of hosted applications software and locally installed software. 4.3.3 Understand the features and characteristics of online data storage and local storage.

The assessment

- ❖ Written paper – presented to candidates in booklet format
- ❖ 90 minutes
- ❖ Date and time are scheduled by Pearson for May/June each year

Content:

- ❖ 5 questions each worth between 18 and 22 marks to total 100
- ❖ Each of the 5 questions may include a mixture of:
 - Multiple choice
 - Short answer
 - Open answer
 - Extended answer

The assessment - continued

- ❖ The paper is designed to be accessible to all students
- ❖ It is intended that the paper increases in difficulty in each question and across the paper.
- ❖ There will usually be two extended responses worth 8 marks each as part of questions 4 and 5.
- ❖ The extended response questions are intended to draw from all areas of the specification content (Topics 1 – 4)

Command words

Multiple choice	
Which ONE	Requires a cross to be placed in the one correct option from a choice of four
Short answer	
Give/ State/ Name	These command words are synonyms. They generally require recall of one or more pieces of information
Identify	This requires information to be selected from a range of possibilities; a list or given stimulus.
List	This requires the recall or identification of one of more pieces of information – single word or phrase
Calculate	This requires a numerical answer, showing relevant working. If the answer has a unit this must be included in the response
Give/state a reason/ reasons	When a statement has been made and the requirement is to give the reason(s) why
Complete	This requires the completion of a table or diagram.

Command words - continued

Open questions	
Describe	To give an account of something. Statements in the response need to be developed as they are often linked but do not need to include a justification or reason
Explain	This requires a linked justification/exemplification of a point. Must require some element of reasoning/justification
Draw	Produce a diagram or image either using a ruler or freehand May require labelling / annotation to express meaning

Command words - continued

Extended questions	
Discuss	Compare different points of view – giving evidence for each one. Should include a conclusion
Analyse	Examine elements in detail. This will involve reviewing a given scenario / goal to identify relevant points / issues/ information / outcomes and explaining how each of these relates to/ impacts on the scenario / goal
Justify	Used in an extended question where a quote / statement is given and students need to support / provide evidence to support the statement.
Evaluate	Review information and then bring it together to form a conclusion, drawing on evidence including strengths, weaknesses, alternative actions, relevant data or information. Come to a supported judgement / decision of a subject's qualities in relation to its context.

Extended questions – level based mark scheme

- ❖ The levels based mark scheme provides the **descriptors** that markers will use to establish the **level** from which it is most appropriate to award a **mark** for a response.
- ❖ Descriptors relate to the mark at the top of the level. A mark is awarded on a best-fit basis so candidates could be awarded a mark from a level even if their response does not match every descriptor from it
- ❖ The mark scheme will also indicate a range of content that is relevant to responses.

The level based mark scheme

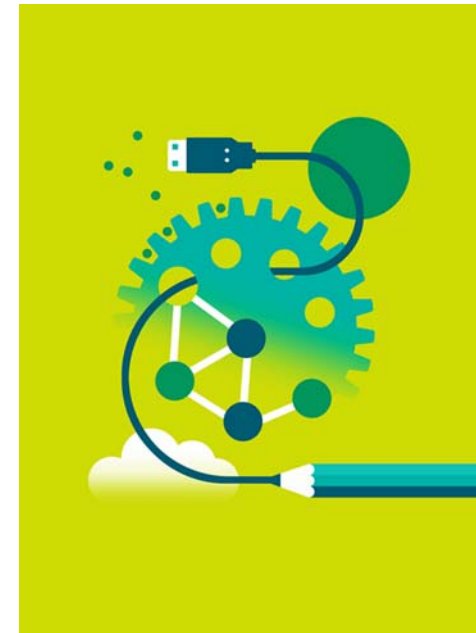
Level	Mark	Descriptor
	0	No rewardable material.
1	1-3	<p>A limited number of points will be identified, which may only support one point of view.</p> <p>At least one point will have evidence to support it.</p> <p>The discussion will have few (if any) links to the scenario.</p> <p>There may be a conclusion but this is likely to be a simple statement.</p> <p>The response will lack clarity and organisation.</p>
2	4-5	<p>A range of points will be identified, which compare different points of view, though the discussion may be unbalanced.</p> <p>Some points will be supported by evidence.</p> <p>The comparisons will include links to the scenario but may include some generic points.</p> <p>A conclusion will be included. which will link with the comparison, though the link may be implicit.</p> <p>The response will show some focus but may not be well organised.</p>
3	6-8	<p>The discussion compares a range of different points of view.</p> <p>Most points will be supported by evidence.</p> <p>The majority of the discussion will link to the scenario.</p> <p>A conclusion will be given that clearly links to the comparisons made in the discussion.</p> <p>The response will show good focus and organisation.</p>

The extended question

- (e) Pat's company offers training that includes some classes at a local college as well as independent study. She is required to submit assignments throughout the course.

Discuss how Pat might use online services to complete her training successfully.

(8)



**A closer look at the
practical section of the
specification**

The practical – content

Students must study **both** of the following topics:

- ❖ Topic 5: Applying Information and Communication Technology
- ❖ Topic 6: Software Skills

The new content

6.4 Web authoring	<p>6.4.1 Use a template: tables/frames, standard page features, banners, menu/navigation.</p> <p>6.4.2 Insert text, images, buttons, animation.</p> <p>6.4.3 Format a web page: headings, subheadings, body text, alignment.</p> <p>6.4.4 Use HTML code: insert hyperlinks, insert images, font enhancements.</p>
6.5 Presentation	<p>6.5.1 Create a template/master slide: placeholders, footer, slide number, background, font enhancements (bold, italic, underline).</p> <p>6.5.2 Create slides: insert text, images, action buttons, hyperlinks; add animation, transition effects.</p> <p>6.5.3 Print: handouts (two to a page, three to a page), notes pages, full page, headers and footers.</p>

The new content - continued

6.6 Graphics	<p>6.6.1 Explain features of image types: bitmap, vector.</p> <p>6.6.2 Create images: combining basic shapes and text, rectangles (including square), circles (including ovals), lines, triangles, arrows, text boxes.</p> <p>6.6.3 Edit images: image editing, cropping, adding captions/text, editing/deletion of unwanted aspects.</p>
6.7 File management	<p>6.7.1 Save work regularly and keep information secure.</p> <p>6.7.2 Use sensible filenames and formats.</p> <p>6.7.3 Create and manage files and folder structures.</p>

The practical assessment

- ❖ Computer based examination presented to candidates as a booklet of structured practical activities using different software applications
- ❖ Candidates produce evidence by printing outcomes
- ❖ 3 hour examination (which includes any printing and collating time)
- ❖ The 3 hour session is scheduled by the centre within a week long window scheduled in May/June by Pearson
 - Candidates sit the exam in **one** (3 hour) sitting
 - Centres can time sessions at any convenient time during the scheduled week
 - Centres may need to hold multiple sessions during the week to enable all candidates to sit the examination

The practical assessment – 2

- ❖ The examination is scenario based and consists of two sections with several tasks in each section
- ❖ Candidates have to complete **all** tasks in **both** sections
- ❖ The assessment is software independent – so most centres are able to use their existing software
- ❖ Suitable free/open source applications may be used in the examination (details can be found on the International GCSE ICT pages of the Pearson qualifications website)

The practical assessment – 3

- ❖ Candidates are required to be able to use software effectively to create and edit:
 - documents
 - spreadsheets
 - databases
 - graphics
 - web pages
 - presentations
- ❖ Candidates are also expected to be able to:
 - explain why products are suitable for purpose and audience and review outcomes
 - explain use of facilities in software applications and/or documents e.g. why organisations have a house/corporate style

Looking at examination content

The paper is based on a scenario.

This may be one scenario for the whole paper or a scenario for each section

Scenario

Sharma Resteasy Hotels owns hotels around the world.
Jayesh Sharma is the owner of the company.
These are the contact details for Jayesh.

Address:
Jayesh Sharma
Sharma Resteasy Hotels
140 Resteasy Road
Prestwood
London
EC6 7HG

Telephone:
020 7946 0753

Website:
www.sreh1999.co.eu

Email:
enquiries@sreh1999.co.uk

House style
The house style for documents is a sans serif font.
Company documents have the logo in the bottom left-hand corner.

Looking at examination content

Tasks within each section
are numbered

Tasks are presented in
initial capital for the word
Task

File names are in
uppercase

Grey boxes contain
instructions but these are
not explicitly assessed

Task A2

Jayesh wants to use spreadsheet tools to analyse the data.

OPEN the worksheet **DETAIL**.

ENTER Task A2 and your name, candidate number and centre number in the footer.

Task A2a

(i) Enter a formula in cell **F32** to calculate the average **Daily Room Rate**.

(2)

Jayesh estimates that 80% of the rooms in the hotels are occupied each day.

(ii) Enter formulae in suitable cells to calculate:

- the daily income for each hotel if 80% of the rooms are occupied
- the total daily income.

(4)

SAVE the spreadsheet as **TASK A2**.

DO NOT PRINT at this stage.

Looking at examination content - 2

Some tasks require candidates to explain or describe aspects of the documents or theory

Task A5b

Answer this question on the document **TASK A5**.

Explain why organisations use house styles for digital products.

(2)

RESAVE TASK A5.

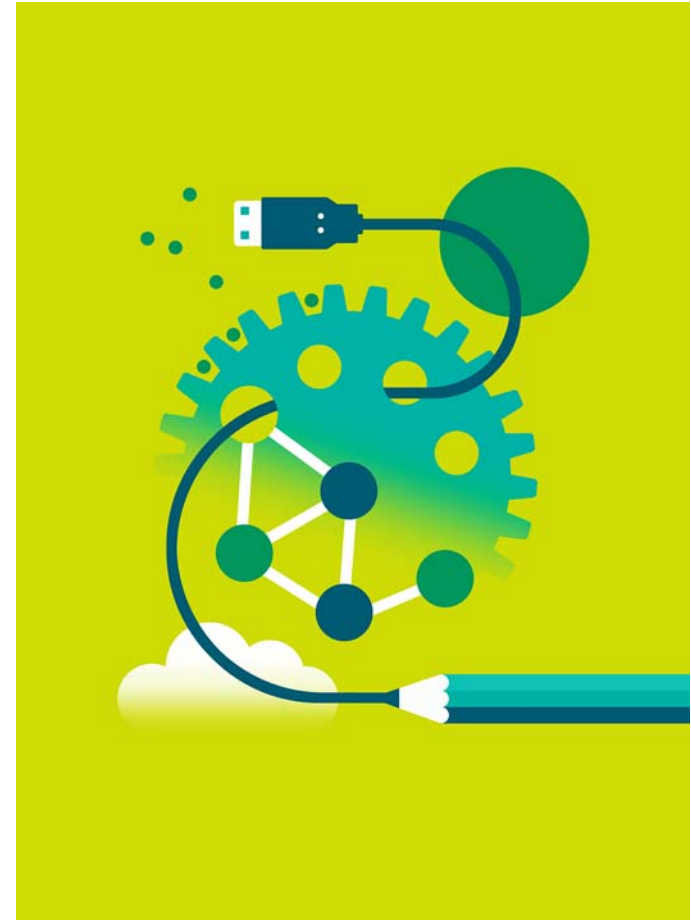
PRINT TASK A5 on **one** side of A4.

(Total for Task A5 = 5 marks)

Analysing content

Look at the extract from the Paper 2 Sample Assessment Materials and the Mark scheme for the task

- ❖ What practical skills are required to complete the task?
- ❖ How would you prepare candidates to complete the task?



Administration for the practical examination

Practical issues for the practical assessment

There are tasks to be done for the practical examination

- ❖ There are tasks to do **before** the examination window
- ❖ There are tasks to do **during** the examination window
- ❖ There are tasks to do **after** the examination window

Before the examination

- ❖ Prepare the candidates using the software available to them during the examination
- ❖ The software must allow them to meet the requirements of the examination
- ❖ Workstations must be arranged to prevent candidates viewing each others' work
- ❖ Have contingency plans – spare computers, alternative printing facilities
- ❖ Identify the seating arrangements (i.e. when and where does each candidate sit the exam during the week)
- ❖ Submit a schedule to ICT subject team as instructed in the ICE document

Before the examination – 2

- ❖ Download the data files for use in the exam
 - from the Pearson qualifications website
 - make sure that the Centre has access
- ❖ Check that the data files work on the software and machines available to the candidates for the exam
- ❖ Create separate user accounts and user areas for each of the candidates
- ❖ Place a copy of the data files in each candidate's exam user area
- ❖ **Do not discuss the contents of the data files with candidates**

During the examination

- ❖ Invigilation: minimum of 1 invigilator : 15 candidates
- ❖ The ICT teacher **cannot** be the sole invigilator
- ❖ Technical Support should be available within easy reach
- ❖ Shared areas should **not** be available to the candidates during the examination
- ❖ Access to the Internet or other electronic communication system is **not** allowed during the examination
- ❖ User areas only accessible in examination session and can only be accessed by candidate
- ❖ **Do not discuss with candidates the contents of the data files or the examination**

During the examination – 2

- ❖ Communication between candidates during the examination is **NOT** allowed
- ❖ Candidates cannot bring materials into exam room - except normal stationery equipment (pen, pencil, ruler etc)
- ❖ Candidates may use the software help files, wizards and templates – but should be advised to use them appropriately
- ❖ Candidates may **not** have access to tutorials or hand outs
- ❖ Candidates may collect printouts if within same room – though it is more secure if someone delivers the print outs to candidates
- ❖ Candidates should where possible collate their work as they produce it – checking for quality of print

After the examination

- ❖ All examination materials must be collected at the end of the session and kept securely
- ❖ All candidates' work must be saved and secure (user areas locked and archived (until after the results)
- ❖ Draft prints are not submitted to examiner
- ❖ The candidates' work should be collated in candidate number order and stored securely
- ❖ When all candidates have completed the examination send the collated work to the examiner.
- ❖ **Do not discuss with candidates the contents of the data files or the examination until after the end of the examination window**

Sharing good practice

Preparing for the theory examination

- ❖ For multiple choice questions candidates need to **read the questions** and the answers carefully (some answers look very similar)
- ❖ For structured questions, candidates should be encouraged to:
 - **read** and attempt to answer all questions – there may be later parts of questions which they can answer
 - use the mark allocation and the space left (often 2 lines per mark) to identify the likely number and length of responses
 - answer the questions in the context of the question – general answers do not maximise marks
 - understand the different examination terms

Practical advice

- ❖ Give students practice examination questions
 - use the sample assessment materials
 - use past papers from similar qualifications for other examples of questions at a similar level
 - use workbooks with examples of questions from the wide range of sources
 - use internet revision sites, online testing sites
- ❖ Older text books may still contain lots of relevant support material

Examiner's comments

- ❖ in an 'explanation' question students should identify an issue and provide an explanation for an additional mark
- ❖ responses often showed confusion about related topics or key words e.g. health / safety copyright / plagiarism
- ❖ students often gave generic answers rather than contextual responses
- ❖ marks were often lost for vague responses
- ❖ marks were lost by candidates only citing or re-wording information which was given in the question
- ❖ many students lost marks by giving repeated answers

Preparing for the practical examination

- ❖ Remind students that they need to:
 - **read the questions** carefully
 - answer the questions asked!
 - check their printouts to ensure that:
 - ✓ their candidate details have been included
 - ✓ the required evidence is visible and readable
 - ✓ the outcomes seem reasonable (e.g. it is unlikely that a small shop will sell millions of pounds worth of goods)

Practical advice

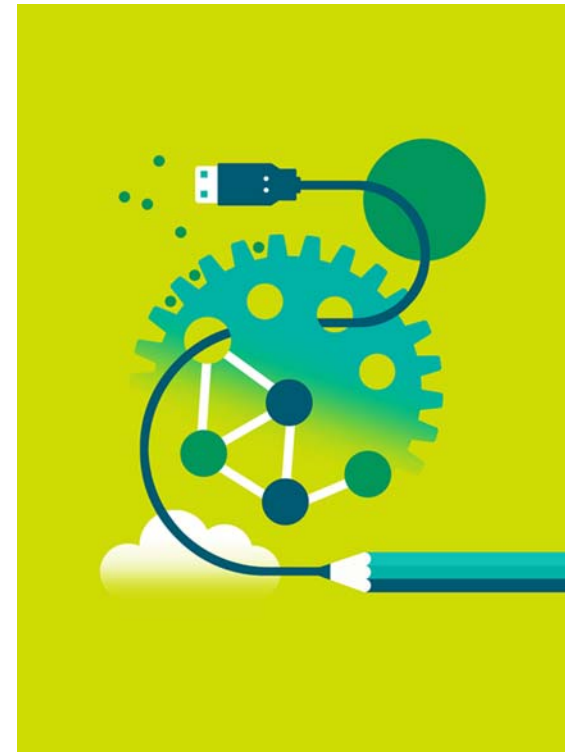
- ❖ Give students practice examination questions
 - use the sample assessment materials
 - use past papers from similar qualifications for other examples of questions at a similar level

- ❖ Prepare candidates with the software and machines they will use for the examination – don't do a major system upgrade a week before the examination!

Sharing ideas

Discuss:

- ❖ What resources have you used to teach ICT skills, knowledge and understanding?
- ❖ How have you made teaching ICT engaging for students?



Free resources on the Pearson website

Getting Started Guide *includes mapping of changes, content and assessment guidance, course planner and resource list*

Editable Scheme of Work *includes activities to support transferable skills development*

Exam Wizard *a free exam preparation tool containing a bank of past Pearson Edexcel exam questions*

Results Plus *free online service giving instant and detailed analysis of your students' exam and mock performance*

Regional support manager *access to a regionally based support manager for any query*

Subject Advisor *For any subject related query you have. Sign up to mailing list*

Exemplar *Marked student responses to SAMs questions*

Additional SAMs *An additional set of Sample Assessment Material available as a secure download*

Pearson Paid-For Published Resources

The Pearson Edexcel International GCSE (9-1) ICT Student Book provides comprehensive coverage of the specification and is designed to supply students with the best preparation possible for the examination.

- ❖ Learning is embedded with differentiated exercises, case studies and exam practice throughout.
- ❖ Provides free access to an ActiveBook, a digital version of the Student Book, which can be accessed online, anytime, anywhere supporting learning beyond the classroom.

Pearson Paid-For Published Resources

- ❖ Transferable skills, needed for progression into higher education and employment, are signposted allowing students to understand, and engage with, the skills they're gaining.
- ❖ A fully integrated Progression Map tool allows quick and easy formative assessment of student progress, linked to guidance on how to personalise learning solutions.
- ❖ Reviewed by a language specialist to ensure the book is written in a clear and accessible style for students whose first language may not be English.
- ❖ Glossary of key terminology.
- ❖ Teacher support materials available online.

Available: August-September 2017

Order through the Global Schools Website.

Support

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For more information, please contact subject advisors, subjects pages/communities and ask the expert.

[Click here to go to "Contact Us" Webpage](http://qualifications.pearson.com/en/support/support-for-you/teachers/contact-us.html)

<http://qualifications.pearson.com/en/support/support-for-you/teachers/contact-us.html>

Other useful links

1. [Grade Boundaries](#)

This page shows the minimum marks needed to achieve a certain grade for all UK and international examinations. Also refer to the examiners report which is available for download with other documents.

2. [Examination Results Statistics](#)

Results statistics summarise the overall grade outcomes of candidates sitting Pearson Edexcel examinations.

3. [Results Plus](#)

- Pearson Edexcel's free online service giving instant and detailed analysis of your students' exam and mock performance.
- See your students' scores for every exam question.
- Understand how your students' performance compares with Pearson Edexcel national averages.

Any questions?

**Thank you for
attending this event.**

How did we do?

*Please fill in the evaluation form that you'll
receive via e-mail in a few minutes.*

There's so much more to learn

Find out more about our range of events at
<http://qualifications.pearson.com/training>

ALWAYS LEARNING