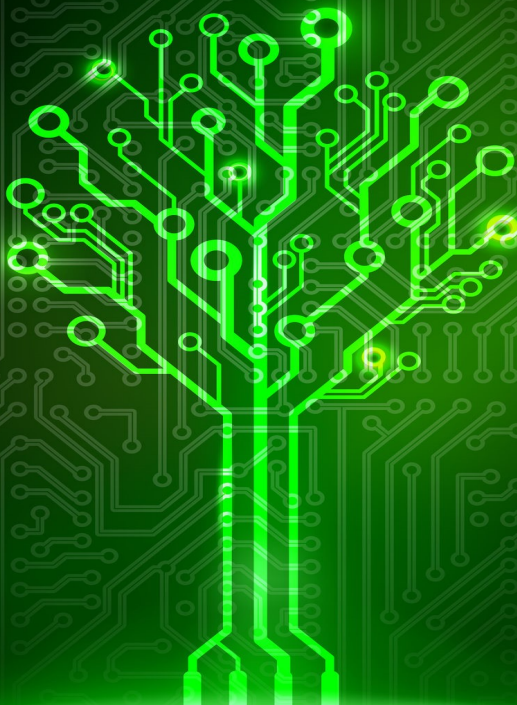# Teaching Resources for
Computer Science and ICT

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Contents

KS3 Computing Interact!ve

Engaging exercises and theory notes complement teaching and learning of the new KS3 Computing curriculum. Provides options for classwork and homework!

Theory notes

★ Concise notes for each topic, providing a brief overview of the key information

★ Embedded animations provide visual demonstrations of concepts such as bubble sort

☑ Great for both introducing and revising each topic

Interactive activities

★ 48 drag-and-drop exercises covering algorithms, programming, data and hardware and digital literacy

★ Instant feedback = no marking required!

☑ Use in conjunction with the notes to assess student understanding
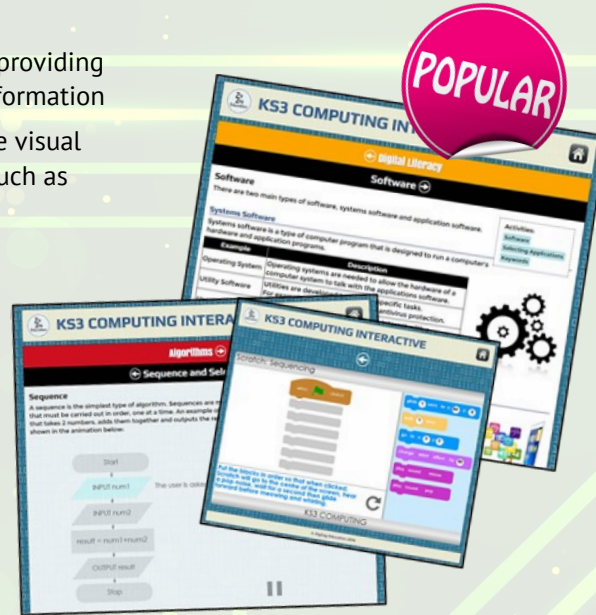
POPULAR

★ **Produced in HTML5/JavaScript, for use on school networks and mobile devices**

★ **HTML front-end enables easy access to all notes and activities**

ZZGP/5699 **£69**+VAT

SEE PAGES 16–25
FOR PROGRAMMING RESOURCES – INCLUDING SUPPORT FOR PYTHON FOR KS3 AND KS4

KS3 Computing Activity Worksheets

150 pages of worksheets, fact sheets and teacher notes covering the KS3 Computing program of study (2014 National Curriculum).

For students:

★ 28 multi-worksheet activities, grouped into seven topics
  ➜ *Abstraction; Programming; Boolean Logic; Binary; Data Representation; Hardware and Software; Using ICT*

★ Varied tasks test pupils' understanding *and* application

★ Supporting fact sheets cover the fundamentals of each topic

For teachers:

★ Planning notes help you fit each activity into your scheme of work
  ➜ *Objectives, NC mapping, keywords, approximate timings and extension ideas*

★ Full, clear answers for hassle-free marking

☑ **No computer required – great for homeworks and cover lessons!**

☑ 'Fun and friendly' style helps pupils engage with the material!

ZZGP/6193 **£99**
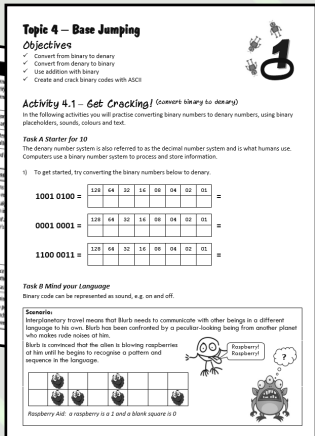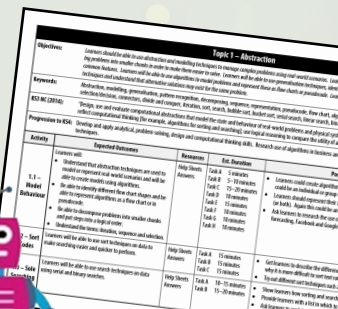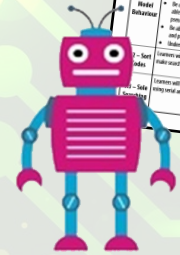
AQA | OCR | EDEXCEL

Course Companions *for GCSE (9–1)*

POPULAR

Help your students tackle the new GCSE (9–1) Computer Science specs with comprehensive, accessible notes written by an experienced examiner.

★ Covers all the content required for the examined units for each specification

★ Student-friendly descriptions and examples – perfect for GCSE students. Diagrams aid understanding and support visual learners

★ Learning objectives, definition boxes, chapter summaries and discussion points to engage learners

☑ Exam-style questions test students' knowledge throughout (answers included!)

"Fantastic.. Provides in depth coverage of the course content, with questions that let the student immediately test themselves on the content they have learnt. The specification points are located above the relevant text, so it is clear that great effort has been made to ensure that it matches the specification as closely as possible." R Eyre, expert reviewer

AQA	ZZGP/7106	£99
OCR	ZZGP/6886	£99
EDEXCEL	ZZGP/7111	£99
EDUQAS	Coming soon	

AQA | OCR | EDEXCEL

Topic Tests *for GCSE (9–1)*

Comprehensive tests covering every bullet point in the new 2016 GCSE (9-1) specifications.

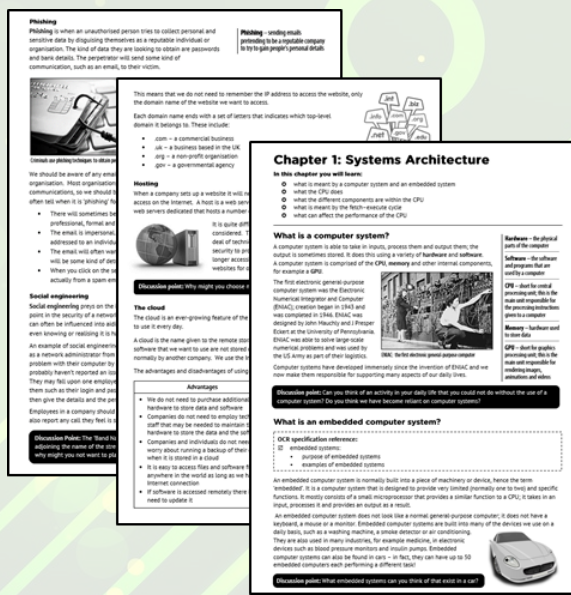An easy-to-set homework or in-class exercise to help you identify gaps in your students' knowledge.

★ 12-13 tests of around 45 marks each, fitting perfectly into a single lesson or homework

★ Clear bullet-point answers and guidance for easy marking

☑ Each test combines a range of question styles to keep <u>all</u> students engaged

☑ Pseudocode ensures accessibility, regardless of the programming language being taught

POPULAR
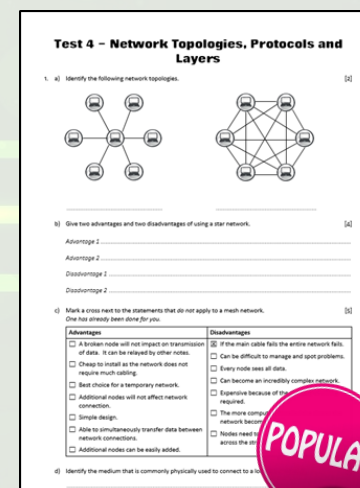
AQA	ZZGP/7107	£64
OCR	ZZGP/6887	£64
EDEXCEL	ZZGP/7110	£64
EDUQAS	Coming soon	

"These tests will prove to be incredibly useful to teachers in gauging their student's understanding of the course material. The given questions offer a mix of question styles to not completely alienate the student, that cover the specification clearly – so weak areas can be spotted sooner rather than later." R Eyre, expert reviewer

AQA | OCR | EDEXCEL | EDUQAS

Python Programming for GCSE (9–1)

Specifically written for use with the new GCSE (9-1) Computer Science specs, *Python Programming* develops the core programming skills that students need – in particular, for completing their non-examined assessment (NEA).

★ 15 chapters covering all programming elements of the specification – clear explanations and packed with example code and programming exercises!

★ 24 varied starters facilitate use in lessons, by recapping previous learning and providing a quick warm-up for the lesson ahead

★ Practice assignment with model solution featuring an original scenario in exam-board style – perfect preparation for the real NEA!

☑ Developed using Python v3.4
☑ Cross-referenced to the each GCSE (9-1) specifications
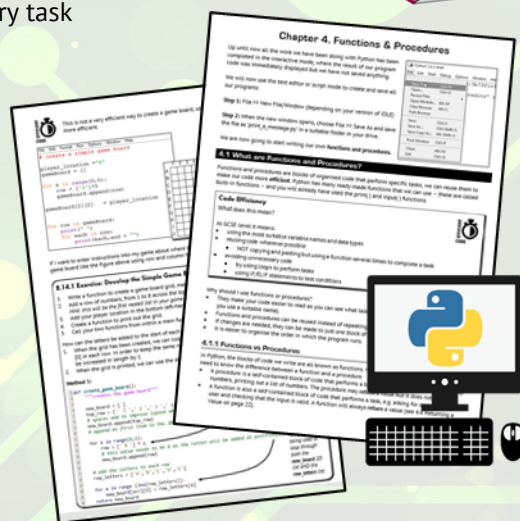☑ Paper and digital solutions for every task

POPULAR

"A really useful resource which will help both teachers and students prepare for the [NEA] of the 2016 spec"
A Hadwen-Bennett (expert reviewer and textbook author)

AQA	ZZGP/6754	£79
OCR	ZZGP/6753	£79
EDEXCEL	ZZGP/6755	£79
EDUQAS	ZZGP/6756	£79

AQA | OCR | EDEXCEL | EDUQAS

Keyword Activities for GCSE (9–1)

Ensure students get to grips with the technical terms in the new 9–1 specs with fantastic topic-by-topic activities. Covers all theory and programming elements, providing a sound basis for the course.

The subject content for each specification is covered by 10-13 sets of keywords, with matching clues. For each set there are a range of different activities, providing varied options for classroom learning, homework and revision.

☑ Varied activities for both individual and group work – *match-up*, *crossword*, *dominoes*, *bingo* and more
☑ Student-friendly descriptions make complex terms accessible to all
☑ Flexible, ready-to-use worksheets for classwork or homework
☑ Answers included – perfect for revision and self-assessment

New for the GCSE (9-1) specifications:

All activities are provided electronically on a CD which can be copied onto your school network and accessed using a HTML interface.

All activities are in PDF format and interactive (HTML5) crosswords are also included!

"A high quality resource... I use the crosswords with high and middle ability and the word-match activities with my lower ability students. The dominoes allow all students access and make learning fun. It is clearly aligned to the syllabus."
– M Siddel (customer)

"I really like this. The pupils find them fun to do especially the interactive crosswords - It reinforces the keywords that they need to remember. Good for revision sessions."
- N Mounsey (customer)

AQA	ZZGP/6787	£59+VAT
OCR	ZZGP/6786	£59+VAT
EDEXCEL	ZZGP/6788	£59+VAT
EDUQAS	ZZGP/6789	£59+VAT

Left Panel

AQA | OCR | EDEXCEL | EDUQAS

'Technical Topics' Animated Presentations and Worksheets *for GCSE (9–1)*

Animated presentations and follow-up worksheets designed to reinforce the mathematical and logical concepts of the new GCSE (9-1) specifications.

An invaluable resource which enables all students to grasp the fundamentals of algorithms, programming, number bases and data representation.

For each topic:

★ Animated presentation providing a step-by-step walkthrough, in two formats:
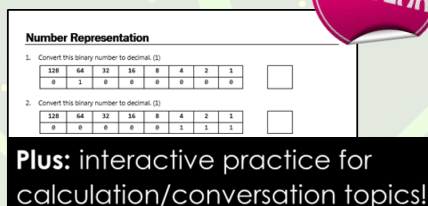 - PowerPoint – ideal for teacher-led classroom learning/revision
  - HTML5 – for use on smartphones and tablets
  - PDF – perfect for printed handouts

★ Supporting worksheet tests students' understanding and application of concepts
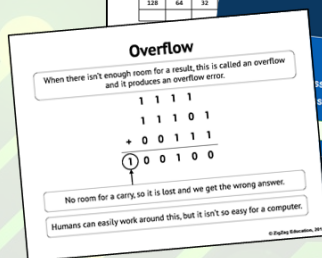
☑ Use in class or for homework; to support teaching and revision.

☑ Includes easy answers for self/peer or teacher marking.

POPULAR

Plus: interactive practice for calculation/conversation topics!

AQA	ZZGP/7170	£69 +VAT
OCR	ZZGP/7171	£69 +VAT
EDEXCEL	ZZGP/7172	£69 +VAT
EDUQAS	ZZGP/7173	£69 +VAT

Right Panel

AQA | OCR | EDEXCEL

Revision Guides *for GCSE (9–1)*

NEW

Structured revision guides ensure complete coverage of the examined theory in the new GCSE (9–1) specifications.

Topic notes and diagrams are supported by examples and definition boxes, while mind maps provide further visual reinforcement of the key concepts.

Practice exam questions test students' knowledge of each topic, providing excellent exam preparation.

☑ Covers all topics in specification order for ease of reference

☑ Python and VB .NET code examples

☑ Exposes students to exam-style questions (with answers and commentary)

☑ Revision checklists

Provided in both A4 loose leaf and mini-booklet formats!

AQA	ZZGP/7108	£74
OCR	ZZGP/7109	£74
EDEXCEL	ZZGP/7105	£74
EDUQAS	Coming soon	
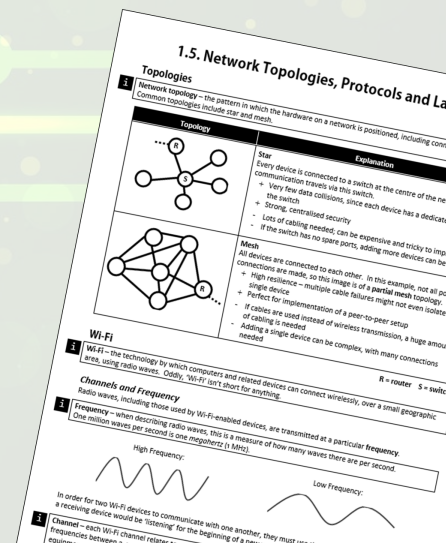
SEE PAGES 16–25
FOR MORE RESOURCES SUPPORTING **PYTHON** AND OTHER LANGUAGES INCLUDING **VB. NET** AND **JAVA**

OCR Component 2 Practice Exam Papers for GCSE (9–1)

Four practice papers with mark schemes for Component 2 of the new OCR GCSE (9–1) specification.

Carefully tailored to mimic both the format and style of the Component 2 examination, the papers provide students with the essential exam practice they need.

- ☑ Between them, the papers cover every spec point
- ☑ Specification and AO mapping for every question
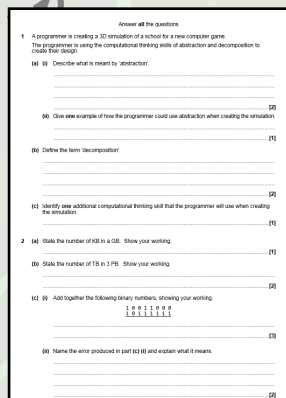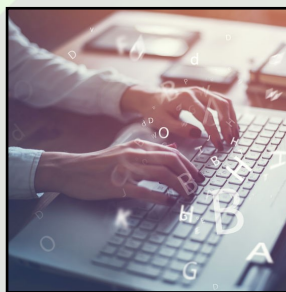- ☑ Written by a senior Computer Science examiner

OCR   ZZGP/7222 **£59**

OCR NEA Companion for GCSE (9–1)

NEW

Accessible, well-structured notes guide teachers and students through the programming project in the new OCR GCSE (9–1) spec.

Includes detailed teacher guidance for each area of marking criteria , describing what is required to reach top marks in each. A cut-down version of the guidance is provided for students, enabling them to focus on just the essentials, before applying it in their own work.

- ☑ Marking criteria is broken down and explained in student-friendly language, illustrated with examples based on an original exam-style scenario
- ☑ 'Deliverables' lists remind students of the evidence they need to provide
- ☑ Self-assessment checklists help students identify where they can improve

OCR   ZZGP/7756 **£69**

Exercises in Computational Thinking

10 scenarios with tasks develop students' understanding of abstraction, decomposition and algorithmic thinking. Perfect for use at KS4 level, including the new 2016 GCSE (9-1) Computer Science specifications!

For each scenario, students progress through the following tasks:

- ➡ *Task Ⓐ* – analyse the problem and identify its inputs, processes and outputs
- ➡ *Tasks Ⓑ and Ⓒ* – create visual representations of the problem using flow diagrams and pseudocode
- ➡ *Extension* – produce a coded solution using a high-level programming language

Includes suggested answers for all tasks – including extension the (Python v3)!

Scenarios feature a range of 'real' problems that students can relate to – greenhouse system, paper-rock-scissors, password checker, and more!

Use as a standalone resource for problem solving / skills development, or as part of a program of study when teaching relevant topics (each scenario has difficulty grading and skills cross-referencing to aid planning).
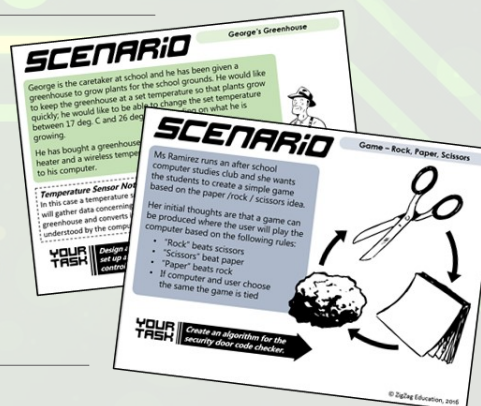
Plus!

- ☑ Introductory student notes on flow charts and pseudo code
- ☑ A4 and A3 templates for completion of tasks Ⓐ, Ⓑ and Ⓒ
- ☑ PowerPoint version to assist teacher-led delivery

ZZGP/5828 **£59**

SEE PAGES 16–25
FOR MORE RESOURCES SUPPORTING PYTHON AND OTHER LANGUAGES INCLUDING VB. NET AND JAVA

AQA | OCR

Course Companions for AS / A Level

Detailed yet accessible student notes for the AS and A Level (2015–) Computer Science specifications.

Over 250 pages covering the whole A Level theory. Supported with examples, images and diagrams to engage students, with questions and tasks to test their understanding and application of knowledge.
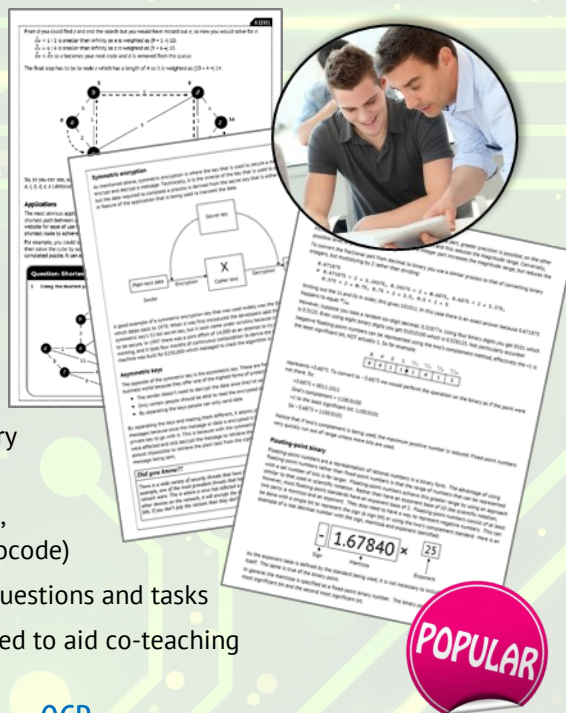
☑ Matches the specification theory – both content and structure

☑ Code examples given in VB, C#, Python and Pascal (plus pseudocode)

☑ Answers and solutions for all questions and tasks

☑ A-Level-only content highlighted to aid co-teaching

POPULAR

AQA

AS + A Level	ZZGP/6061	**£199**
AS only	ZZGP/6060	**£119**

OCR

AS + A Level	ZZGP/6065	**£179**
AS only	ZZGP/6064	**£119**

AQA | OCR

Topic Tests for AS / A Level

Short tests covering every topic of the AS and A Level (2015–) specifications.

Includes a variety of question types to engage learners, combining short and long answer questions with questions requiring the completion of tables, and construction of diagrams and pseudocode.

☑ Provided in both worksheet (with answer lines) and question-only format.

☑ Includes answers and mark scheme

AQA

A Level	ZZGP/6071	**£99**
AS only	ZZGP/6068	**£69**

OCR

A Level	ZZGP/6355	**£99**
AS only	ZZGP/6300	**£69**
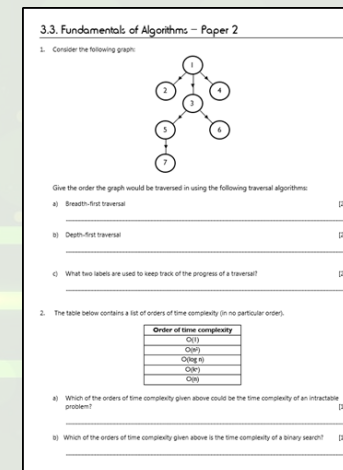
"I like the range of different question types – a combination of practical and theoretical, mathematical and philosophical… There is excellent coverage [of the specification]."
- R Lee, HoD

SEE PAGES 16–25
FOR PROGRAMMING RESOURCES SUPPORTING **PYTHON** AND OTHER LANGUAGES INCLUDING **VB. NET** AND **JAVA**

AQA | OCR | EDUQAS

'Technical Topics' Animated Presentations and Worksheets *for AS / A Level*

Animated presentations and follow-up worksheets designed to reinforce the mathematical and logical concepts of the AS and A Level (2015–) specifications.

For each topic:

★ Animated presentation providing a step-by-step walkthrough, in two formats:
  - ☐ PowerPoint – ideal for teacher-led classroom learning/revision
  - ☐ HTML5 – for use on smartphones and tablets
  - ☐ PDF – perfect for printed handouts

★ Supporting worksheet tests students' understanding and application of concepts

✓ Use in class or for homework; to support teaching and revision.

✓ Includes easy answers for self/peer or teacher marking.

AQA

AS + A Level	ZZGP/6063	£139+VAT
AS only	ZZGP/6062	£89+VAT

OCR

AS + A Level	ZZGP/6157	£109+VAT
AS only	ZZGP/6156	£69+VAT

EDUQAS

AS + A Level	ZZGP/6459	£119+VAT
AS only	ZZGP/6458	£89+VAT

Fractions

Dot Product
The dot product is a number calculated by combining two vectors.
This formula is used to calculate the dot product.
$a.b = a.b...$

Polynomial Complexity
The rate at which time complexity rises increases as the number of items gets larger.
$O(n^k)$
k is a constant value.
This graph illustrates polynomial complexity.
Bubble sort is an example of polynomial c...

POPULAR

"Wonderful."
- O Howson, HoD

AQA | OCR | EDUQAS

Revision Guides *for AS / A Level*

Comprehensive yet concise revision guides covering the essential theory for the AS and A Level exams in manageable chunks.

Tables, diagrams and keyword boxes are used effectively throughout, to present information in a structured, logical way for revision.

✓ Covers all topics in specification order for ease of reference
✓ Use as a complete guide or to reinforce key ideas at the end of each topic
✓ Exposes students to exam-style questions throughout the course

AQA

AS Paper 1	ZZGP/6072	£34	A Level Paper 1	ZZGP/7759	£54
AS Paper 2	ZZGP/6073	£49	A Level Paper 2	ZZGP/7760	£79
➥ *Both AS*	ZZGP/6074	~~£83~~ £74	➥ *Both A Level*	ZZGP/7761	~~£133~~ £119

OCR

AS Component 1	ZZGP/6281	£54	A Level Component 1	ZZGP/7212	£79
AS Component 2	ZZGP/6282	£34	A Level Component 2	ZZGP/7213	£54
➥ *Both AS*	ZZGP/6283	~~£88~~ £79	➥ *Both A Level*	ZZGP/7214	~~£133~~ £119

EDUQAS

|					
AS Components 1 & 2	ZZGP/6541	£74	A Level Component 1	ZZGP/7575	£54
			A Level Component 2	ZZGP/7576	£54
			➥ *Both A Level*	ZZGP/7577	~~£108~~ £99

NEW

AQA | OCR | EDUQAS

Practice Exams for AS / A Level

3 original practice papers and mark schemes for each exam board.

Covering every new specification topic between them, this trio of papers uses the same structure and questions types used in the real exam.

This helps to familiarise students with the exam – especially if used for mocks.

✓ Includes questions on the new areas of the specifications!

✓ Mark schemes combine model answers with guidance on how to award marks.

✓ Questions papers also provided in non-write-on (photocopy-friendly) format.
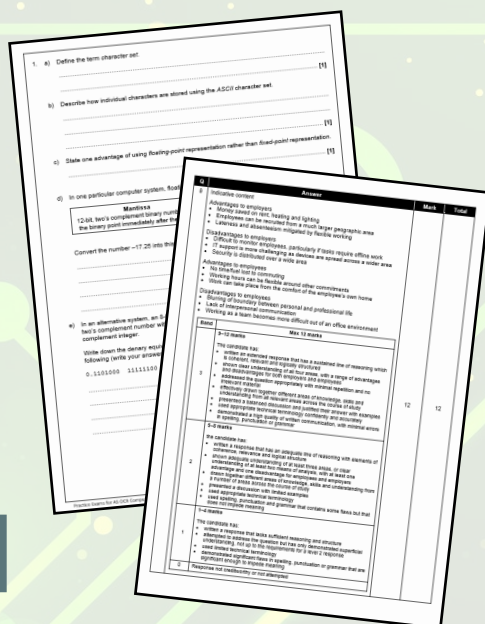
AQA

A Level Paper 2 ZZGP/6893 £59
AS Paper 2 ZZGP/6075 £44

OCR

A Level Component 2 ZZGP/7223 £64
AS Component 1 ZZGP/6076 £44

EDUQAS

AS Component 1 ZZGP/6231 £44

Programming with Java

Comprehensive theory notes and practical activities provide a rich programming experience for students.

Includes everything your department needs to successfully teach Java at Key Stage 3, 4 or 5.

Broken into ten chapters, each containing:

★ Student-friendly explanations, interspersed with example code and packed with tips throughout!

★ A wealth of practical activities, requiring students to apply their programming skills to given problems

★ An end-of-chapter quiz to test students' understanding of Java (with answers)

Provided as (1) a hard copy in presentation folder and (2) a collection of PDF files, made accessible via an intuitive HTML front end.

*Packed with troubleshooting and 'best practice' tips!*

Plus:

✓ Consolidation task – drawing upon all skills previously learnt
✓ Model solutions to all activities (paper and electronic)
✓ Glossary of key terms

Chapters

1 Numbers, Strings and Concatenation
2 Variables and Data Types
3 Selection and Comments
4 Libraries and Error Handling
5 Iteration
6 Nesting, Algorithms and Strings
7 Objects, Methods and Properties
8 Arrays and Lists
9 Writing to and Reading from Text Files
10 Defining and Using Classes

POPULAR

ZZGP/5553 £99 +VAT
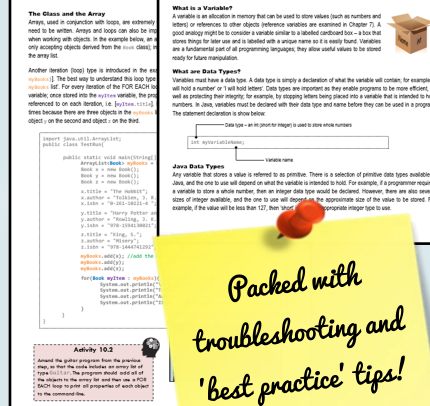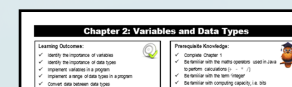
Python Code Bank for GCSE

Comprehensive, fully annotated code banks provide students with an accessible quick-reference and a wealth of code to adapt for their own programs.

Produced by a senior examiner, the skills covered, code explanations and examples of use are all pitched perfectly for GCSE.

★ Covers all the essential programming tools that students need!

★ For each tool: the purpose, syntax and varied examples with line-by-line commentary!

★ Range of formats included for flexible use!
➥ A4 handouts ➥ A5 booklet ➥ HTML webpage ➥ py3/.txt files

★ Aids students' programming work in class and at home!

> "This resource has been written to provide a base of the core tools for GCSE, which can be used off-line for students to reference whilst completing the NEA tasks." - V Ellis

ZZGP/7700 **£59**+VAT

Covers:
1 Output
2 Input
3 Variables
4 Casting
5 Data Manipulation
6 Selection IF
7 Logical Operators
8 String Manipulation
9 Iteration
10 Lists
11 File Handling
12 Subroutines
13 Searching and Sorting
14 Random Number Generation
15 Dictionary

NEW

Python Exercises for GCSE

> "Perfect preparation for students' NEAs." – S Forsythe (expert reviewer)

10 engaging exercises featuring original skeleton code, giving students practice in two core skills: ① debugging programs and ② developing their functionality.

A carefully selected range of themes (including encryption, string manipulation, validation, 2D arrays, libraries and file handling) and varying complexities make the exercises great for use at GCSE.

For each exercise:
➥ *Scenario* – introduction to the program/concept + skeleton code
➥ *Part A* – combines debugging tasks with questions testing understanding students' understanding of the code
➥ *Part B* – three modification tasks of progressive difficulty – ideal for extension

Plus:
☑ Error guide – 15 of the most common syntax and logic errors in Python are explained (with suggested fixes)

☑ Cheat sheet revealing the correct Python syntax (a useful reference, particularly for lower-ability)

☑ Skills mapping helps you to target specific programming techniques

ZZGP/7232 **£59**

> "I really like the overall idea of the resource and the style and structure are excellent, this is a resource I'm looking forward to using."
>
> - S Forsythe (expert reviewer)

Python Challenges for KS3/4

ZZGP/5688 **£59**+VAT

30 programming challenges test students' skills, including sequence, selection and repetition; variables, arrays and functions. Increasing complexity aids natural progression from KS3 to KS4.

Provided in a range of formats, these challenges are equally valuable for teacher-led lessons or independent learning – including homework.
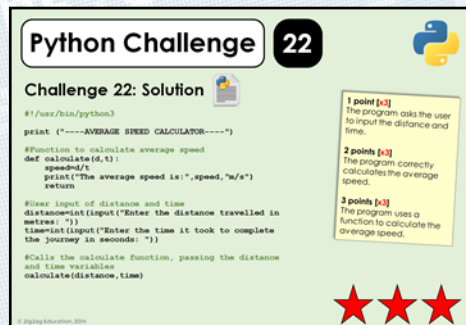
POPULAR

Everything comes in photocopiable and electronic formats:

★ Challenges – provided as presentations, 'challenge cards' and a handy A5 booklet

★ Exemplar solutions with comments (Python3) – including Python scripts; perfect for demonstration before students attempt each challenge, and for comparison afterwards

★ Simple mark scheme – accessible for both teachers and students

Plus!

☑ Teacher PowerPoint – the challenge, solution and mark scheme in one place!

☑ Marking grid for teachers (and students) to monitor progress

Python Challenge **22**

Challenge 22: Solution

```
#!/usr/bin/python3
print ("----AVERAGE SPEED CALCULATOR----")

#Function to calculate average speed
def calculate(d,t):
    speed=d/t
    print("The average speed is:",speed,"m/s")
    return

#User input of distance and time
distance=int(input("Enter the distance travelled in
metres: "))
time=int(input("Enter the time it took to complete
the journey in seconds: "))

#Calls the calculate function, passing the distance
and time variables
calculate(distance,time)
```

1 point [×3]
The program asks the user to input the distance and time.

2 points [×3]
The program correctly calculates the average speed.

3 points [×3]
The program uses a function to calculate the average speed.

★★★

"Very useful for absolute beginners through to more experienced users... The first tasks are suitable for KS3, but the latter ones are firmly aimed at KS4." - M Fairbank, Computing Teacher

"An excellent resource that covers learning to program in Python well and in sufficient depth to meet the National Curriculum standards at KS3/4. " - P Chapman, HoD

A well-designed resource that will save a lot of time for teachers... I particular like the consistency and the simple division of the slides in three different parts: the challenge, the key elements they need to use and the level of difficulty." - H Gonzalez, HoD

Python Programming Guide for KS4/5

The perfect companion for any KS4/KS5 student learning to program using Python.

Broken into nine chapters, each containing:

★ Student-friendly explanations interspersed with annotated code snippets (Py3); packed with hints and tips throughout!

★ Extensive end-of-chapter exercises:
   1. Programming tasks test students' problem-solving skills in a progressive manner
   2. Questions get students thinking about programming theory and Python code

Plus:
☑ Project-style task with exemplar solution
☑ Solutions (Python3) to all exercises in paper and electronic formats
☑ Glossary of key terms

Chapters
1 Numbers and Basic Operations
2 Values, Variables and Expression
3 Data Types
4 Functions
5 Control Structures
6 Lists
7 Working with Files
8 Classes
9 Dealing with Errors

ZZGP/5083 **£79**
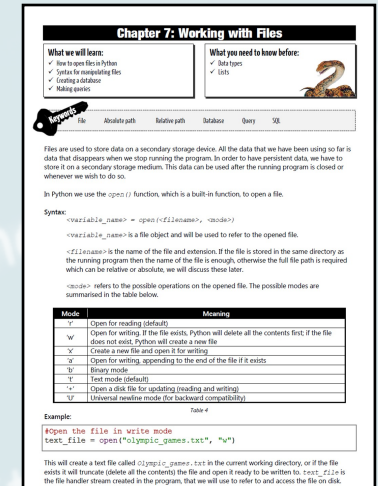
"An excellent resource with clear explanations and a good range of practice tasks with solutions. Both pupils and staff can use it to learn Python." E Grant, HoD and customer

"An excellent resource which any school using Python would be well advised to purchase." - P Chapman, HoD

"A fantastic resource. This would be useful to be given to students in lessons or for independent study... The layout is very good, with the theory behind the coding covered in each section" - A Sanders, Computing Teacher

Raspberry Pi Project Pack for KS3/4

ZZGP/5826 £69

10 tried-and-tested projects to help students get the most out of the RPi.

Provides a practical approach to delivering computing theory – fantastic for KS3/4 lessons, and for any RPi enthusiasts outside of lessons.
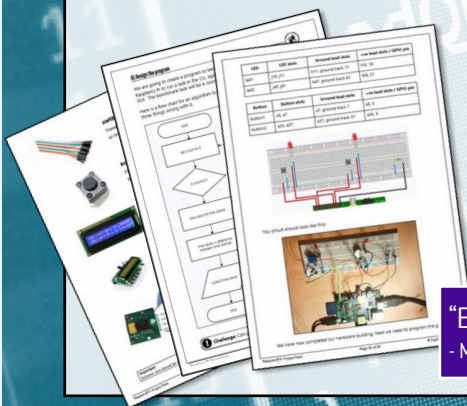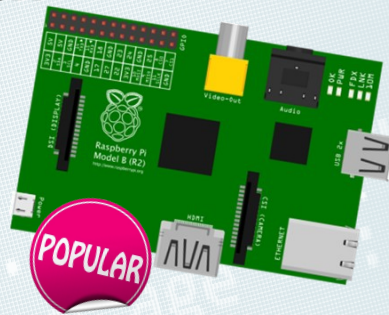
The projects:

POPULAR

✓ Are varied and engaging – ranging from setting up a web server and connecting remotely, to creating games, binary calculators and cameras

✓ Include the relative difficulty/duration, aims, requirements and equipment to help you embed RPi work into your scheme of work

✓ Are broken down into manageable tasks, including research, program design and build (Python) tasks, plus extension ideas to push students further

✓ Combine instructions with theory to develop students' knowledge *and* skills

Plus:
★ Intro to the RPi and the components used
★ Python Solutions – including Python3 scripts on CD

"Brilliant. Easy to follow and great ideas "
- M Sexton, HoD and customer

"Excellent. Tasks had all students engaged and excited."
- M O'Connor, Computing Teacher (customer)

PHP on a Stick with SQLITE

The ultimate solution for learning PHP and SQL

This unique all-in-one tool allows students to learn about, develop and run their own PHP and SQLite projects straight from a USB stick! Ease of use and engaging interactivity enhances learning.

★ 32 interactive tutorials on all aspects of programming and databases

★ 8 working demonstrations with detailed explanations
➜ *address book, booking system, quiz generator + more!*

★ Unique Sandbox tool to build and run projects
➜ *code editor, import files, backup to Zip + more!*

☑ Ready to go – *no additional software required*

☑ Run PHP applications locally – *no web server required*

☑ Perfect for projects and coursework

Demo videos at zzed.uk/ZZGP search for 'php stick'

"Outstanding" - M Northern, ICT Teacher

"Very impressive" - D Waller, ICT Teacher

Includes CD with master files to copy directly to students' memory sticks

ZZGP/4334 £169 +VAT
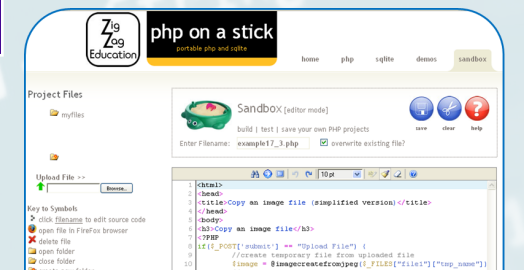
Guide to PHP and MySQL

ZZGP/2756 £89

Comprehensive 189 page guide to both PHP and MySQL. Includes CD with 116 code snippets and practical examples.

✓ Clear summaries of what will be learnt in each chapter
✓ Includes explanations of programming code and worked examples

VB .NET Code Bank for GCSE

Comprehensive, fully annotated code banks provide students with an accessible quick-reference and a wealth of code to adapt for their own programs.

Produced by a senior examiner, the skills covered, code explanations and examples of use are all pitched perfectly for GCSE.

ZZGP/7701 £59+VAT

★ Covers all the essential programming tools that students need!

★ For each tool: the purpose, syntax and varied examples with line-by-line commentary!

★ Range of formats included for flexible use!
  ➥ A4 handouts ➥ A5 booklet ➥ HTML webpage ➥ py3/.txt files

★ Aids students' programming work in class and at home!

Covers:
1. Output
2. Input
3. Variables
4. Casting
5. Data Manipulation
6. Selection
7. Logical Operators
8. String Manipulation
9. Iteration
10. Arrays
11. File Handling
12. Subroutines
13. Searching and Sorting
14. Random Number Generation
15. Records
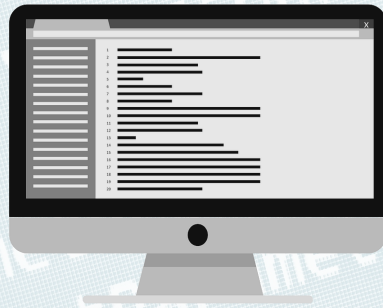
NEW

"This resource has been written to provide a base of the core tools for GCSE, which can be used offline for students to reference whilst completing the NEA tasks." - V Ellis

VB. NET Procedural Programming Tasks

Twenty-two varied and engaging programming tasks.

The exercises challenge student's grasp of programming fundamentals; selection, iteration, nesting, methods and functions, as well as more advanced areas such as error handling, arrays and file handling.

Suitable for students using VB .NET at KS4 and KS5.

The exercises:
✓ are provided as PDF files accessible via a HTML front end
✓ are supported by optional background theory notes
✓ include difficulty level, approximate timings (30-120 minutes) and learning aims to aid planning

★ Working solutions provided in plain text and as .exe files
  ➥ Produced in .NET 2010, compatible with

ZZGP/4925 £69+VAT

Client-Side Web Design
### HTML5 · CSS3 · JAVASCRIPT

Comprehensive yet accessible theory and practical tasks covering HTML, CSS and JavaScript.

Perfectly pitched at KS3/4, there is no better resource for developing skills and understanding of client-side technologies.

Everything students need to create or enhance their own websites:

★ 9 progressive chapters combine explanations and tips with example code and a wealth of practical tasks.

★ Project task consolidates skills learnt in previous chapters.

★ Interactive _Try it Out_ tool allows students to test and edit every piece of code in their browser!

✓ In-depth coverage of the latest standards – **HTML5** & **CSS3**!

✓ Each chapter starts with learning outcomes, prior knowledge and keywords, and finishes with a chapter summary and quiz (answers included).

✓ The perfect independent learning tool for beginners, and as quick reference for the more advanced.

TRY IT OUT TOOL

ZZGP/5980 **£129**+VAT
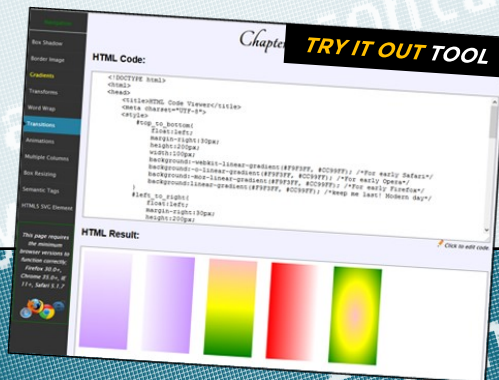
Videos and Tasks for Adobe Photoshop and Adobe Premiere Pro

Engaging videos and realistic practical tasks help students develop the core skills needed to become competent users of Adobe Photoshop and Premiere Pro.

Perfect for dedicated graphic design work and for creating or editing assets for video-editing, animation and web design.

★ Series of short video tutorials with audio and on-screen commentary. Perfect for learning the required skills, and as a reference point during assignment work.

★ Practice tasks with step-by-step instructions allow learners to apply different skill sets – either with or without the aid of the video tutorials.

➥ Varied, tasks involve the creation and editing of still and moving images

➥ Sample images and video clips included for every task

✓ Ideal for independent learning

✓ HTML interface provides access to files – ideal for use on your school network

✓ Tested on all major browsers and devices – including iPad and Android tablets.

Adobe Photoshop ZZGP/6456 **£59**+VAT
Adobe Premiere Pro ZZGP/6457 **£49**+VAT

Developed using the Creative Cloud (CC) versions of the software – although the concepts/instructions will be similar (if not identical) to earlier versions.

Edexcel GCSE ICT Interact!ve

POPULAR

Interactive activities and concise presentations support delivery and enhance learning of the Unit 1 theory.

The six topics of Unit 1 are broken down into 28 sub-topics.

For each:

Theory presentation

★ Dynamic HTML5 summary of the key concepts, in manageable chunks

★ Images and examples illustrate concepts and engage visual learners

✓ Great for both introducing and revising each sub-topic

Interactive activities

★ Varied HTML5 exercises, including *gap fill*, *match-up*, *sorting*, *ordering* and *multiple-choice*

★ Instant feedback – no marking required!

✓ Ideal for starters, plenaries and revision
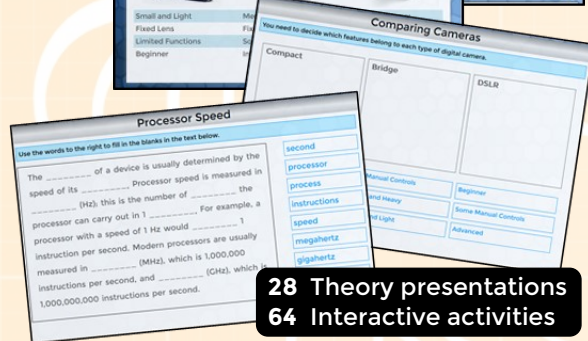
28 Theory presentations
64 Interactive activities

★ Produced in HTML5/JavaScript, for use on school networks and mobile devices

★ HTML front-end enables easy access to all notes and activities

ZZGP/5839 £89 +VAT

OCR GCSE ICT B063 Resource Pack 2018

NEW

Understanding the pre-release

Comprehensive revision notes on every bullet point on the OCR GCSE B063 pre-release material, released in September for examination in June 2018

Student-friendly summaries for maximum retention, supported with engaging diagrams and screenshots!

Revision questions consolidate learning (with answers)

Revision Exam Preparation
Full original practice exam paper with clear mark scheme!

Digital format!
All content also digitised for use on your school's network / VLE.

ZZGP/7776 £59

"Exactly what I was hoping it would be. Well illustrated and good readability – about right for my Yr11 group. The practice exam is a valuable addition – well thought through and clearly the author has previous experience writing exams"
– T Blunn , ICT Teacher (2016 resource pack)
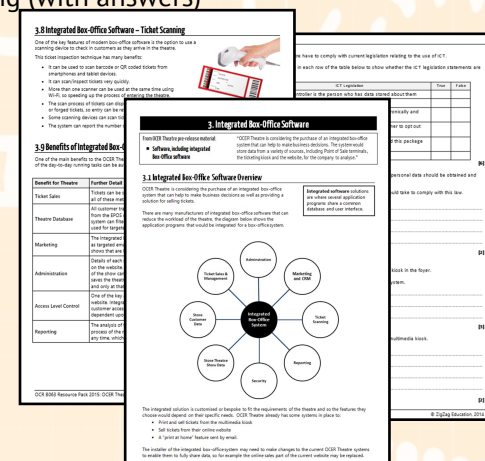
"The resource is well written [and] the topics are well covered with reference to the leisure centre."
– P Holt , ICT Teacher (2016 resource pack)

SEE ORDER FORM FOR THE FULL LIST OF GCSE ICT RESOURCES FOR AQA, EDEXCEL AND OCR

Learner Companions

Unit 1 (endorsed)	ZZGP/5561	£79
Unit 2	ZZGP/5821	£59

Accessible, student-friendly notes – interspersed with recap questions and end-of-topic activities – provide complete coverage of the unit theory.

Each chapter covers a specific learning aim, making it easy to find what you need Bullet-point lists and tables summarise key information, to ensure accessibility for all students. Enhanced with clear diagrams, and imagery and examples to support understanding and maintain interest.

Recap questions test and consolidate knowledge throughout. End-of-topic activity worksheets provide engaging options for classroom learning, homework and revision.

Practice Examinations

Unit 1	ZZGP/5511	£54
Unit 2	ZZGP/5689	£54

★ 3 practice papers per unit, each provided in two formats:
 1. Photocopiable – hard copy, like conventional exams
 2. Electronic form (.docx) – students answer questions on-screen, as they would in the real thing!

★ Clear, detailed mark schemes for each paper
★ Mapping grid shows how each aim is covered!
✓ Perfect for revision – and for use as mocks!
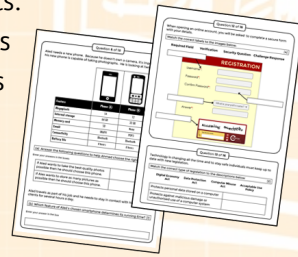
Activity Worksheets

Unit 1	ZZGP/5824	£49
Unit 2	ZZGP/5825	£49

Bridge the gap between learning and assessment with scenario-based activities for BTEC ICT Units 1 and 2. Provides a wealth of options for classwork, homework and revision – with minimal teacher preparation needed.

★ 10 scenarios – based on real-life contexts such as *shopping* and *manufacturing*
★ 4 worksheets per scenario – with activities to facilitate learning at both levels:
 ① Multiple-choice ② Labelling ③ Gap-fill ④ Reveal-the-word puzzle
★ Cross-referenced to the unit specification – see which aims are covered where
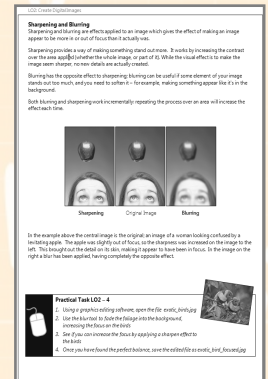★ Full, clear answers – for hassle-free marking (by the teacher or learner)

L1/L2 ICT Resource Packs

R001	ZZGP/4764	£69
R002	ZZGP/4794	£69
R003	ZZGP/4919	£39
R004	ZZGP/5136	£49
R006	ZZGP/4920	£39
R009	ZZGP/4987	£49

Fact sheets combine unit theory with questions and practical tasks, offering learners the vital knowledge and practice they need.

Ideal for use as a complete learning aid (recommended for stronger learners) or as individual hand-outs throughout the unit (recommended for weaker learners).

★ Each chapter covers a specific Learning Outcome
★ Enhanced with photographs, diagrams and screenshots
★ Answers included for easy marking and self-assessment

> "Every LO is covered with all the relevant sub-headings for each, giving the learner good guidance as to expectations ... Students can relate to content by seeing relevant images [which] capture interest and stimulate learning." - P Ramnaraain, HoD

L1/L2 ICT Activity Worksheets

A series of practical activities testing a range of unit content, plus over 50 activity worksheets to aid delivery.

The worksheets:

✓ use attractive design & imagery to engage learners
✓ are ordered by Learning Outcome so that they fit perfectly with your scheme of work
✓ are equally effective as lesson activities, homeworks or recap/revision exercises
✓ come with clear, concise answers for easy marking
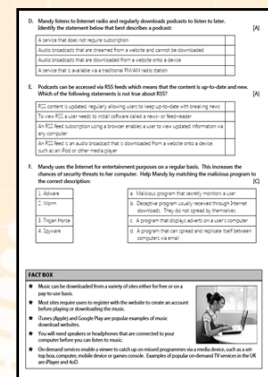
|		
R001	ZZGP/4795	£69
R002	ZZGP/4796	£69
R003	ZZGP/5244	£44

L1/L2 *Creative iMedia* Resource Packs

Accessible theory notes, tasks, checklists and templates designed
to prepare learners for their assignment. Issue as a complete guide
at the start, or as a series of handouts throughout the unit.

★ Student-friendly notes covering all the key features and concepts
  ➥ structured by Learning Outcome to ensure no gaps in knowledge!
  ➥ 'key term' and 'did you know' boxes for interest, and questions
    and tasks to develop and consolidate understanding

★ Scenario-based task allows students to practice all of
  the required the skills and knowledge

★ *Self-assessment checklists* – proven to raise attainment
  by showing learners how they can improve

✓ Crossword reinforce the unit's key terminology
✓ Answers for all questions

R082 Digital Graphics ZZGP/6462 **£49**
R088 Digital Sound ZZGP/6760 **£49**
R089 Digital Video ZZGP/6761 **£49**
R090 Digital Photography ZZGP/6762 **£49**
R091 Game Design ZZGP/6806 **£49**
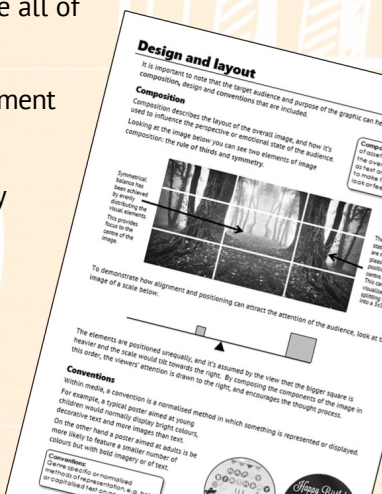
Ordering Options

All resources come as photocopy/digital masters with site licence

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　　　　　　　　　PDF format for easy sharing and printing

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　　　　　　　　　Word & PDF formats for easy printing and editing

See the enclosed order form for the full list of resources

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