Teaching Resources for
ICT AND COMPUTING

ZigZag Education

VIEW INSPECTION COPIES AT **ZZED.UK/ZZGP**

Contents

GCSE ICT AQA

GCSE ICT EDEXCEL

AQA CONTROLLED ASSESSMENT COMPANIONS

Student Booklet

★ Varied *exemplar material* with clear illustrations and linked commentary, ensuring relevancy with each year's tasks

★ Student-friendly *Assessment for Learning* checklists improve grades by making assessment criteria accessible to students

Teacher Booklet

Clear **notes** explains what the teacher needs to know and do at every stage!

"I like the separate teacher and student sections with examples and LOVE the AfL checklists, these would be very useful for students" - K Dearing, HoD

AQA TOPIC TESTS

Comprehensive assessments reinforce students' understanding of every AQA specification topic.

Features a variety of question types used in the exam, structured to support a differentiated approach. For use in class, as homework and for general revision.

19 specification topics, each with sections requiring:

✓ Multiple-choice answers – to get warmed up (write-on)
✓ Short-to-medium answers – to test key concepts (write-on)
✓ Essay-style answers – to stretch and challenge (non write-on)

FOR MORE GCSE AQA ICT RESOURCES SEE ORDER FORM

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
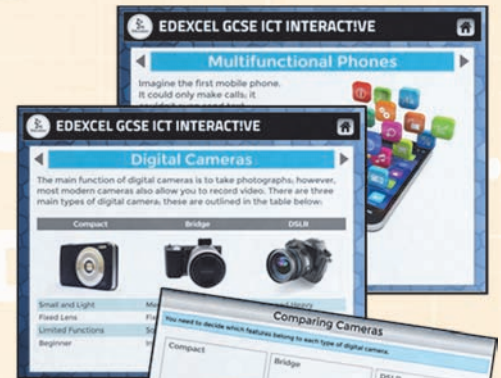
28 Theory presentations
64 Interactive activities

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

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

EDEXCEL COURSE COMPANION

Comprehensive, brilliantly-structured companion for the Edexcel specification.

Accessible, student-friendly notes – interspersed with recap questions and end-of-topic activities – provide complete coverage of the Unit 1 theory.

- ✓ Covers every point in the specification – including the Edexcel *Tech Updates*'
- ✓ Bullet-point lists and tables summarise key information, ensures that it is accessible to all students.
- ✓ Enhanced with clear diagrams, illustrations and examples to maintain student's interest.
- ★ Recap questions test and consolidate knowledge throughout.
- ★ End-of-topic activity worksheets provide a variety of engaging options for classwork, homework and revision.

ZZGP/5209 **£79**

EDEXCEL PRACTICE PAPERS

Four practice papers for Edexcel Unit 1.
Carefully tailored to mimic the Edexcel examination, these papers provide your students with the best possible exam preparation.

- ★ Clear mark scheme, with unacceptable answers and additional guidance
- ✓ Ideal for mock exams, or for selecting questions in class or for homework
- ✓ Between them, the papers cover the whole spec

"Very good content and layout. An exact match to the specification." - J Marshall, HoD (customer)

ZZGP/4157 **£69**

EDEXCEL TOPIC TESTS

Ensure complete coverage with this topic-by-topic question bank for the Edexcel specification.

For use in class, as homework and for general revision – see which areas your students excel on and which need a recap.

- ★ Seven tests covering the whole unit
- ★ Clear answers for easy marking

"Well thought out and structured in a manner suitable for use by staff and students. "
- S Barron, ICT Teacher

"Valuable tool to use at the end of or as a mid-point test through each topic. "
- R Wallace, ICT Teacher

ZZGP/5084 **£39**

EDEXCEL REVISION GUIDE

Dynamically presented photocopiable revision guide for Edexcel Unit 1.

All the key information needed for the Unit 1 exam in bite-size chunks, with revision tasks to consolidate understanding.

Concise overviews covering every specification topic, including:

- ★ **Revise it** – snappy explanations & visual summaries for maximum retention!
- ★ **Test it** – engaging revision exercises and exam-style questions reinforce knowledge of each topic

Plus! ✓ Clear answers for all revision questions ✓ Revision checklist
Provided in A4 + A5 booklet formats. Add PDF for easy printing!

"Very effective - clear and to the point."
- K Tucker, ICT Teacher

ZZGP/4576 **£69**

OCR B063 DIGITAL PRE-RELEASE RESOURCE PACK

2016: PROGRESS LEISURE

New digital resource pack supporting the June 2016 B063 pre-release material, *Progress Leisure* . An essential aid for teaching and learning, exam-practice and revision.

Teaching and Learning:
Comprehensive student notes and questions with answers for every topic!

Exam Practice:
Full, original practice paper with mark scheme

Revision:
Topic summaries recap the essential detail, providing a useful aide-mémoire!

✓ Produced by an experienced ICT examiner

POPULAR

"The resource is well written [and] the topics are well covered with reference to the leisure centre." – P Holt , ICT Teacher

"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

ZZGP/6077 **£59**+VAT

FOR MORE GCSE OCR ICT RESOURCES SEE ORDER FORM

WJEC STARTER ACTIVITIES WITH EXAM PRACTICE

Inject pace into your lessons with these fun and rewarding activities – all directly linked to the WJEC specification. All necessary resources, instructions and answers are provided for every activity.

★ 30+ activity worksheets per unit covering every subtopic, with full answers
★ Exam-style questions for every subtopic

✓ Varied, engaging activities keep students interested and motivated
✓ Ideal for homework or revision, in addition to classroom use

"An ideal resource for starter activities, plenaries and homework activities. Good range of activity types, from connecting with lines, cutting out, cloze, rearranging letters, sorting, fill the blanks, etc. Answers are clear and correct. There is nothing to dislike about this resource. Clarity of the tasks, language used and the overall feel of the resource is ideal for KS4 students. Instructions are clear and easily followed." - P Nolan, ICT Teacher

"An excellent resource [that] will really help my students achieve in the GCSE theory part of the course. I loved the variety of resources, as theory lessons can be quite dry, but this really helps bring some life to the lesson! As it reiter-ates and supports the learning process of pupils through a variety of techniques and resources." - J Hawkins, HoD
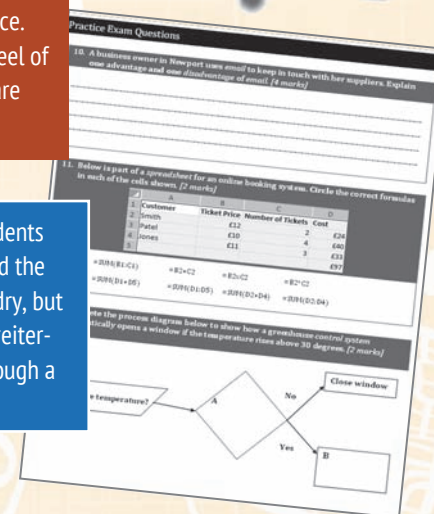
| Unit 1 | ZZGP/4554 | **£49** |
| Unit 3 | ZZGP/4589 | **£49** |

WJEC REVISION GUIDES

Superbly presented revision guides for the new 2010 WJEC GCSE ICT specification. All the key information needed for the exams in bite-size chunks, with revision questions to consolidate understanding.

Concise single-page overviews for every specification topic, including:

★ **Revise it** – snappy explanations & visual summaries for maximum retention!

★ **Test it** – vitally exposes students to exam-style questions

Plus!

✓ Clear answers for every question

✓ Revision checklist for students to record their progress

✓ *Key Words* and *Concept Map* revision activities help students identify terms and make connections between topics

"Excellent quality summarises all areas of unit 1 perfectly... One of the best resources I have seen from ZigZag." - M Williams, Head of ICT

"Matches the unit perfectly."
- J Parry, ICT Teacher

"I like the freshness of the layout. Also there are a number of good examples in the resource which will help the pupil see its application in the real world." - V Price, Head of ICT

"This is a great resource! Contains all the info needed for the Unit 1 exam."
- J Hawkins, Head of ICT
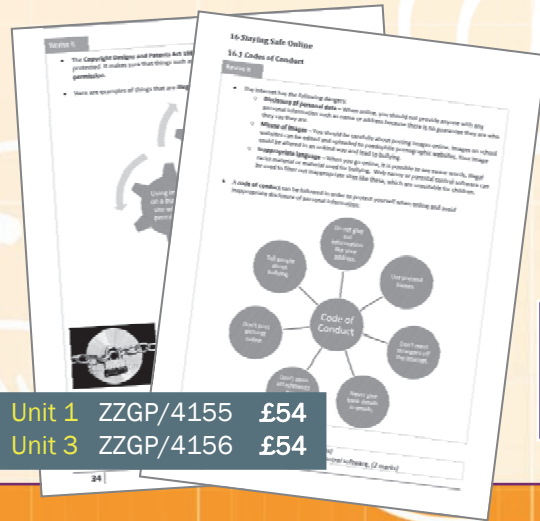
Unit 1 ZZGP/4155 £54
Unit 3 ZZGP/4156 £54

LEARNER COMPANIONS

Comprehensive, brilliantly-structured companions BTEC Level 1 / Level 2 ICT.

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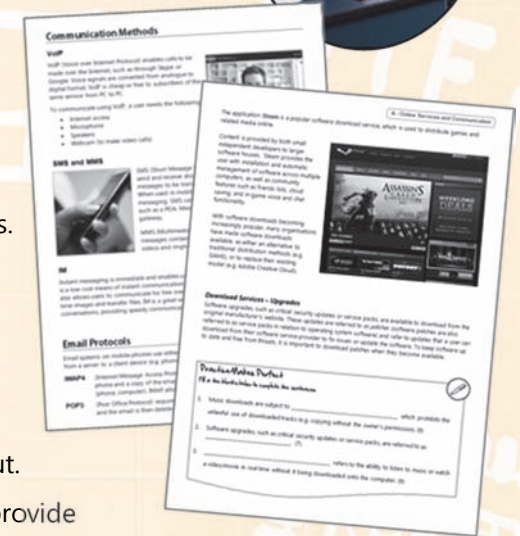
Unit 1 (endorsed) ZZGP/5561 £79
Unit 2 ZZGP/5821 £59

BTEC ICT LEVEL 1/2 (FIRSTS)

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)

"An invaluable way of preparing students for the exam using a variety of activities to engage all learners... As a standalone resource for busy professionals this is excellent." - P Grove, HoD

PRACTICE EXAMINATIONS

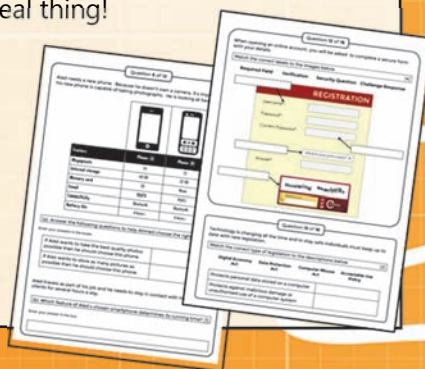|		
Unit 1	ZZGP/5511	**£54**
Unit 2	ZZGP/5689	**£54**

★ Three authentic practice papers per unit, each provided in two formats:
  1. Photocopiable – hard copy, like conventional exam papers
  2. Electronic form (.docx) – so students can answer questions on-screen, as they would in the real thing!
★ Clear, detailed mark schemes for each paper
★ Cross-reference grid shows how each aim is covered!
✓ Perfect for revision – and for use as mocks!

"Excellent... Questions reflected exam style and built up gradually with a good mix of styles." - A Green, customer

CAMBRIDGE NATIONALS ICT LEVEL 1/2

LEARNER COMPANIONS

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

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
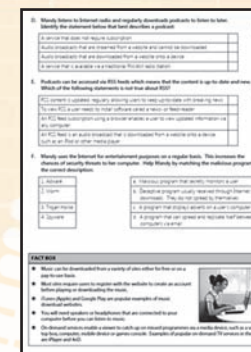
R001	ZZGP/4795	**£69**
R002	ZZGP/4796	**£69**
R003	ZZGP/5244	**£44**

AQA GETTING FULL MARKS IN ESSAY QUESTIONS

Essential guidance and support raises student performance in essay-style exam questions. Offers expert advice on how to tackle essay questions in exam conditions. Practice questions with full exemplar answers allow students to apply this knowledge and compare their answers.

- ✓ Written specifically for AQA ICT by senior ICT examiners
- ✓ Designed to address common mistakes in candidates' essay answers
- ✓ Plenty of exemplar answers so students can see what examiners are looking for

Exam Theory:
- ★ Tips for ensuring effective examination technique
- ★ Insightful examiner commentary and analysis, showing students:
  - ➡ How to understand the question through command words
  - ➡ Step-by-step guide to essay writing, from planning through to conclusion

Exam Practice:
- ★ Exam-style essay questions for every A Level topic (<u>50</u> for AS, <u>32</u> for A2)
- ★ Exemplar essay plans and full answers for every question

POPULAR

"Gives students a much better understanding of how to tackle longer examination questions. Furthermore, students enjoyed using the materials and found it beneficial to compare their attempts with the exemplar answers." - S Barron, Head of ICT

"Really good resource for focusing on exam technique [which] has helped my students a great deal…Matches [the specification] perfectly." - Miss Collins, ICT Teacher, happy customer

"A great resource, well written and well laid out… Put together in a logical order, that will support the students in developing their skills in writing essays" - L Murphy, ICT Teacher

AS ZZGP/4616 **£59**
A2 ZZGP/4617 **£44**

AQA INFO3 PRACTICE PAPERS 2016

POPULAR

Two original papers in authentic AQA exam style, with Section A questions testing students' understanding of the June 2016 pre-release material (released by AQA in March)

- ★ Detailed mark schemes include specification mapping, full model answers and marking guidance
- ★ Produced by an experienced A Level ICT teacher and examiner

ZZGP/6257 **£49**   Pre-order for April 2016
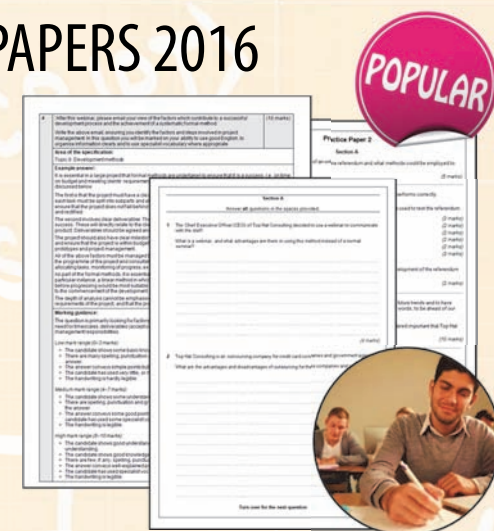
AQA DIFFERENTIATED ONLINE REVISION

Interactive online revision exercises with progress tracking for A Level AQA ICT.

- ★ Engaging, differentiated exercises enable students to independently consolidate what they've learnt and prepare for their exams.
- ★ Intuitive progress tracking allows teachers and students to monitor performance and direct revision.
- ★ Web browser access allows students to use in class, at home or even 'on the move'.
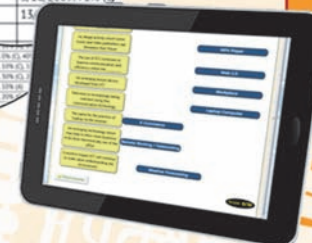
AS ZZGP/3533 **£179+VAT**
A2 ZZGP/3534 **£119+VAT**
Prices for 1 year subscription for up to 100 users

FOR MORE A LEVEL AQA ICT RESOURCES SEE ORDER FORM

A LEVEL ICT OCR WJEC

OCR REVISION PODCASTS

| G061 | ZZGP/4703 | £59+VAT |
| G063 | ZZGP/4704 | £59+VAT |

This superb set of questions and answers in MP3 format enables on-the-move revision and is fantastic for auditory learners.

Students can load the tracks onto their MP3 player, smartphone or tablet within minutes. Alternatively, an intuitive web interface makes the podcasts accessible via an Intranet, internal VLE or standalone computer.

★ 200+ Q&As per unit, covering every specification topic
★ 3 levels of differentiation help to ensure effective revision for every student

FOR MORE A LEVEL OCR ICT RESOURCES SEE ORDER FORM

WJEC REVISION GUIDE

| IT1 | ZZGP/4797 | £69 |
| IT3 | ZZGP/5021 | £59 |

All the key information needed for the Unit 1 examination in bite-size chunks, with revision tasks to consolidate understanding.
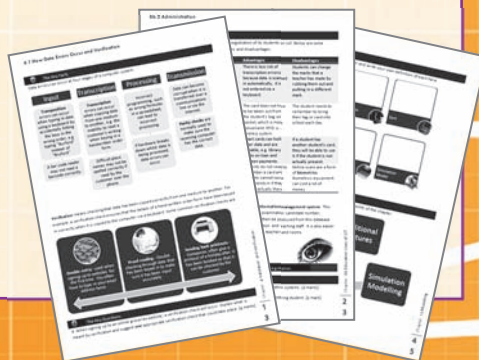
Concise single-page overviews for every specification topic, including:

★ **Revise it** – snappy explanations & visual summaries for maximum retention!
★ **Test it** – vitally exposes students to exam-style questions

Plus!
✓ Clear answers for every question
✓ Revision checklist for students to record their progress
✓ *Key Words* and *Concept Map* revision activities help students identify terms and make connections between topics

KS3 COMPUTING 2014 NATIONAL CURRICULUM

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!

Pre-order for February 2016

| ZZGP/6193 | £99 |

For programming support, including resources for PYTHON and SCRATCH, see pages 28–35

KS3 COMPUTING
2014 NATIONAL CURRICULUM

GCSE COMPUTER SCIENCE (MULTIPLE SPECS)

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
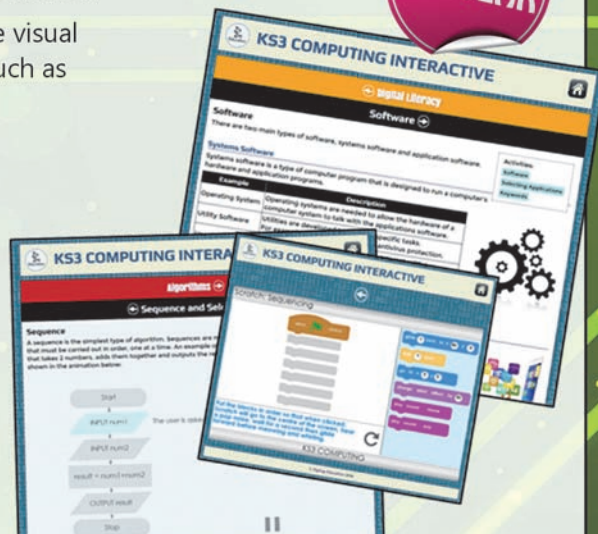
ZZGP/5699 **£69** +VAT

POPULAR

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

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

For programming support, including resources for
**PYTHON** and **SCRATCH** , see pages 28–35

COURSE COMPANIONS

AQA OCR WJEC

Concise yet comprehensive student notes for GCSE.

All the computer science theory needed for the entire GCSE in specification order. Use as a complete guide or as separate handouts to reinforce learning.

★ Clear descriptions and engaging layout make it perfect for GCSE

★ Images and diagrams support visual learning

★ Carefully selected pseudocode and "real code" snippets ensure that examples are accessible to students learning any programming language

★ End-of-topic questions test student knowledge (with answers)
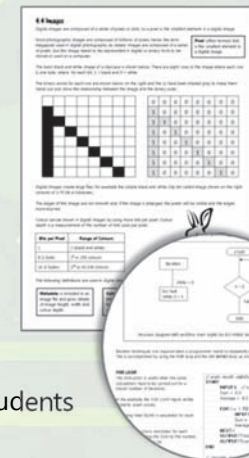
"Excellent, very comprehensively written. The content and level of this resource is perfect in supporting the course text and specification. Provides useful examples for both teacher and student alike ." – N Hulme, Computing Teacher

AQA
ZZGP/4900 **£89**

OCR (COMPUTING)
ZZGP/5297 **£89**

"A good mix of text and visual material which should cater to the majority of learning styles. The exam style questions reinforce the topics... Covers the specification well." – S Barron, HoD

WJEC
ZZGP/5439 **£89**

""Excellent and comprehensive... Clearly matched to the specification with good detail and example questions." - M Rawlins, Computing Teacher

TOPIC TESTS

AQA OCR EDEXCEL WJEC

Ensure complete coverage with topic-by-topic question banks for GCSE.

For use in class, as homework and for general revision – see which areas your students excel on and which need a recap.

★ 11-13 tests covering the specification theory

★ Pseudocode makes tests accessible to all

★ Clear example answers for easy marking

"A quick and easy way to check pupil progress."
- N Mounsey, HoD and customer

"Helpful, saves me searching around through past papers and then finding the mark scheme answers." - J Fuller, HoD and customer
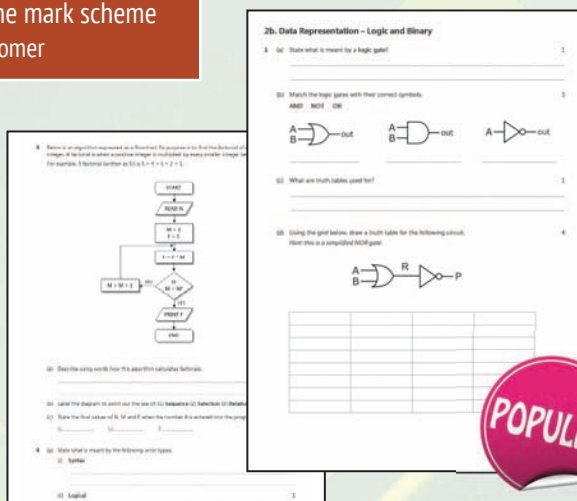
AQA
ZZGP/4831 £44

OCR (COMPUTING)
ZZGP/4832 £44

EDEXCEL
ZZGP/5430 £59

WJEC
ZZGP/5179 £44

POPULAR

"Provides a powerful assessment tool for the teachers that can be used in lessons or for homework." - H Gonzalez, Teacher

TECHNICAL TOPICS WORKSHEETS

AQA OCR WJEC

Superb collection of worksheets designed to support students' learning of the trickier parts of the specification. Provides practice and reinforcement of 15-16 'technical topics' such as binary logic, number systems and algorithms.

★ Each worksheet includes specification cross-reference, accessible notes and examples

★ Full solutions allow quick, easy marking

★ Use in class or for homework; to support teaching or for revision

★ Also provided as an A5 workbook
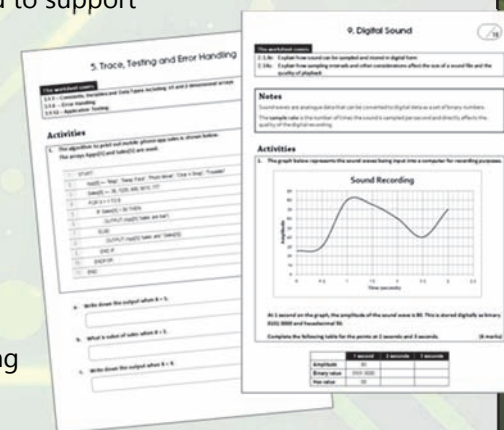
"A wonderful resource that supplements my own teaching resources/strategies... It saves much time planning and I can focus more on teaching. The resources match my scheme of work and lesson plans... Solutions to the activities [are also provided] which is a great help."
- T Ditta, HoD and customer

AQA
ZZGP/5427 £54

OCR (COMPUTING)
ZZGP/5249 £54

WJEC
ZZGP/5557 £54

"Fantastic layout with clear thought into each section... There is a good onus on independent learning, which is important for students."
- L Price, HoD

"Lovely resource – I like the writing style, very well suited to all levels with a GCSE Computing class... These will make excellent homeworks and the answers make life easier." - C Charles, teacher

REVISION GUIDES

AQA OCR EDEXCEL WJEC

Structured revision guides ensure complete coverage of the examined units.

Topic notes supported by examples and diagrams for visual reinforcement of 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

★ Exposes students to exam-style questions (with answers)

★ Also provided as an A5 booklet

"All terminology is explained in way that is accessible to the teacher and student...I like the fact that the resource follows through the specification in chronological order.
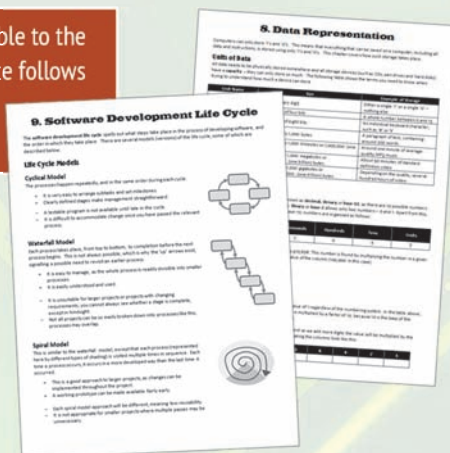- A Akuffo-Kelly, HoD

AQA
ZZGP/5429 £69

OCR (COMPUTING)
ZZGP/4923 £69

EDEXCEL
ZZGP/5827 £74

WJEC
ZZGP/5181 £69

"A comprehensive guide that covers all aspects of the specification... The practice exam questions clearly fit in with the sample paper provided by the exam board... An invaluable resource for both students and teachers alike." – A Bennett, Computing teacher


PRACTICE PAPERS

AQA OCR WJEC

Three practice papers with mark schemes for each specification .

Carefully tailored to mimic the format and style of the real papers, providing students with the essential exam practice they need.

Ideal for use as 'mock' examinations; alternatively, individual questions can be set during lessons, homework or revision.

★ Each paper is cross-referenced to the specification

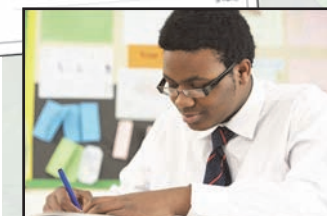★ Clear mark scheme with example answers and marking guidance
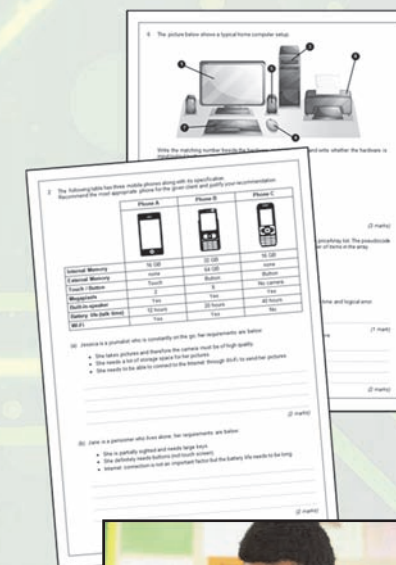
AQA
ZZGP/5558 £49

OCR (COMPUTING)
ZZGP/5248 £49

WJEC
ZZGP/5700 £49

"A good range of questions and topics... Matches the specification very well."
- P Curran, Computing teacher

"Very helpful, well organised, mapped to the specification, highly relevant. Has the look and feel of a real exam paper" – J Fuller, HoD

KEYWORD ACTIVITIES

AQA OCR EDEXCEL WJEC

Ensure students get to grips with the technical terms with fantastic topic-by-topic activities.

The specification theory content is broken into sets of keywords with descriptions.

For each set there are four different activities, providing varied options for classroom learning, homework and revision.

★ Activity worksheets for individual and group work
➥ *match-up, dominoes, fill in the gap*

★ Interactive web-based crosswords – great for network/VLEs

★ Crossword worksheets

✓ Provides differentiation throughout ✓ Solutions included

AQA
| ZZGP/4833 £49 |

### OCR (COMPUTING)
| ZZGP/4834 £49 |

EDEXCEL
| ZZGP/5950 £49 |

WJEC
| ZZGP/5180 £49 |

"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, HoD (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, HoD (customer)
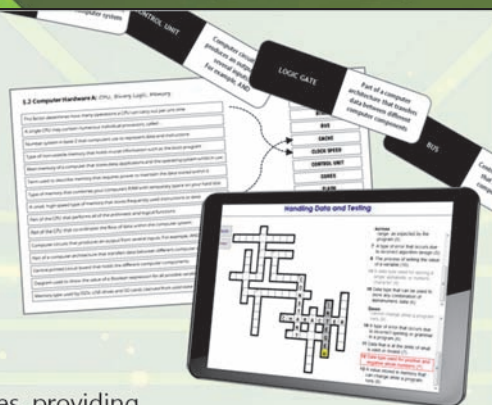
OCR STUDENT GUIDE TO A453 (PROGRAMMING PROJECT)

Accessible, well-structured notes guide students through the programming project for OCR Unit A453.

Includes separate sections for each area of marking criteria *(Design, Development, Programming, Testing and Evaluation)*, describing what is required to reach top marks in each. Students read the guidance for each section before applying it in their own work.
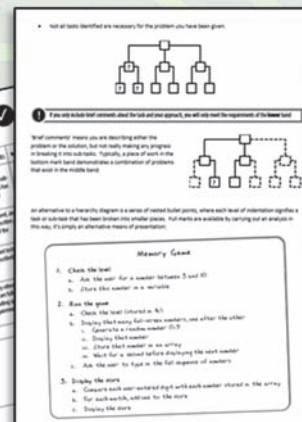
For each section:

★ Marking criteria is broken down and explained in student-friendly language, illustrated with examples based on an original scenario

★ 'Deliverables' lists remind students of the evidence they need to provide

★ Self-assessment checklists help students identify where they can improve

"Excellent... well designed and covers all the major points students need to consider and cover in order to achieve a high mark in their assessment." – H Gonzalez, HoD

"It is clear that careful planning and excellent thought went into the creation of this resource... [it is] systematically organised and carefully presented in a meaningful and methodical manner. Language used is simple and comprehensible" - P Ramnarain, HoD

"Matches OCR [A453] very well and refers to it throughout. Its layout makes it very easy for staff and students to check progress. It constantly explains how to reach the higher bands."

| ZZGP/6126 £49 |

OCR LEARNING GRIDS

ZZGP/5346 £49

Students read their textbook/notes to complete a grid of questions in spec order. Cross-referenced to the Hodder Education textbook and ZigZag Education's Course Companion to ensure all students can find the information they need.

A godsend for students who find learning more challenging.

✓ An easy-to-set (no prep needed), yet valuable homework option

✓ Results in a comprehensive set of revision notes

"Excellent... It can be shrunk down to A5 to produce revision cards, and lets me direct students' revision purposefully." - J Fuller, HoD, customer
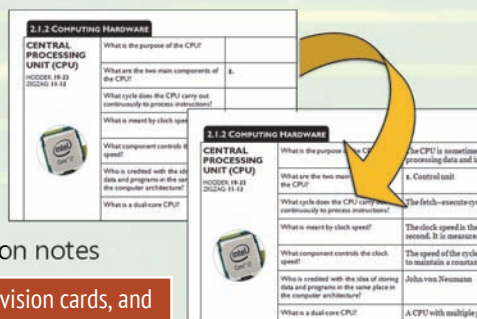
OCR VB .NET PRACTICAL PROGRAMMING GUIDE

Comprehensive guide divided into nine topics providing a structured learning path.

★ Detailed notes will provide the perfect companion to your teaching

★ Questions and activities throughout help to ensure students have grasped the key points (answers included)

✓ Cross-referenced to the OCR GCSE Computing spec
✓ For developing GUI Windows-based applications (as opposed to console mode)
✓ Code is compatible with VB .NET Express 2005/2008/2010

ZZGP/4927 £79

For programming support resources, see pages 28–35

COURSE COMPANIONS

AQA OCR

Detailed yet accessible student notes for the new 2015 AS and A Level 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.

POPULAR
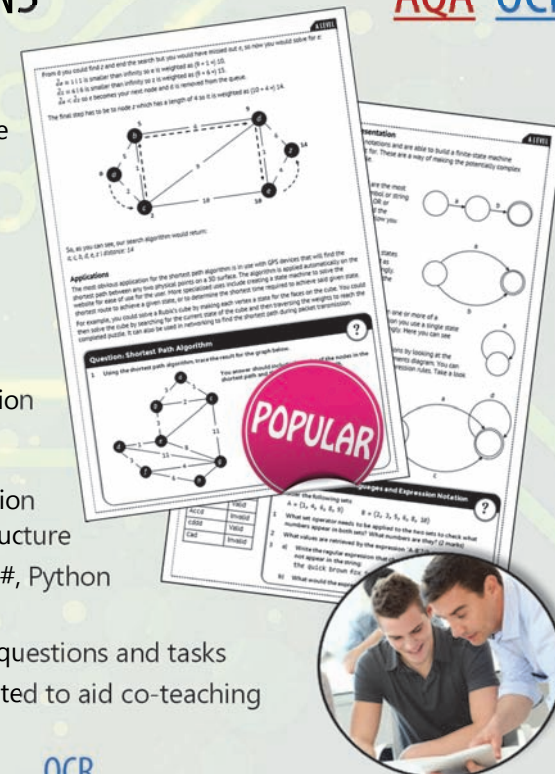
★ Tightly matches the specification theory – both content and structure

★ 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

AQA

| A Level | ZZGP/6061 £199 |
| AS –only | ZZGP/6060 £119 |

OCR

| A Level | ZZGP/6065 £199 |
| AS –only | ZZGP/6064 £119 |

TECHNICAL TOPICS

AQA OCR

PRESENTATIONS AND WORKSHEETS

Animated presentations and follow-up worksheets designed to reinforce the mathematical and logical concepts of the 2015 Computer Science specs.

For each topic:

★ Animated presentation providing a step-by-step walkthrough, in two formats:

❶ PowerPoint – ideal for teacher-led classroom learning/revision

❷ HTML5 and ❸ MP4 video for use on smartphones and tablets

❹ PDF – perfect for printed handouts

★ Supporting worksheet tests students' understanding

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

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

Bit Depth POPULAR

State Transition Diagrams

AQA

| A Level | ZZGP/6063 | £139+VAT |
| AS –only | ZZGP/6062 | £79+VAT |

OCR

| A Level | ZZGP/6157 | £99+VAT |
| AS –only | ZZGP/6156 | £59+VAT |

"Wonderful."
- O Howson, HoD

TOPIC TESTS

AQA OCR

Short tests covering every topic of the new AS and A Level 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 |
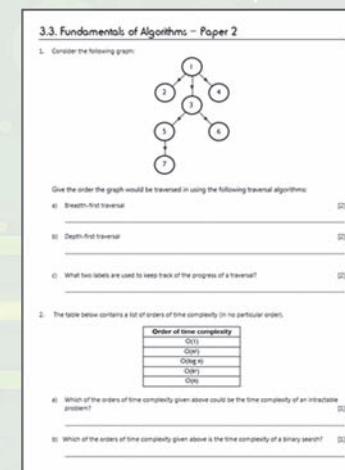
"I like the range of different question types – a combination of practical and theoretical, mathematical and philosophical... There is excellent coverage [of the specification]."
- R Lee, HoD

REVISION GUIDES (AS) AQA OCR

Comprehensive yet concise revision guides covering the essential theory in manageable chunks.

Tables, diagrams and keyword boxes are used effectively throughout, to present information in a structured, logical way for revision.
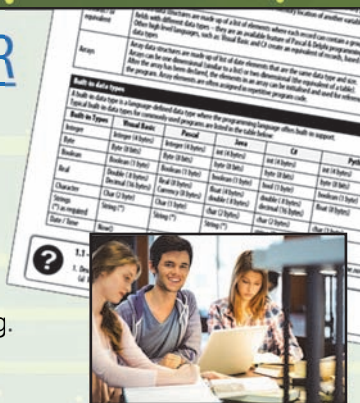
Revision questions (with answers) test understanding.

AQA

AS Paper 1	ZZGP/6072 £34
AS Paper 2	ZZGP/6073 £49
➥ *Both*	ZZGP/6074 ~~£83~~ £74

OCR

AS Component 1	ZZGP/6281 £54
AS Component 2	ZZGP/6282 £34
➥ *Both*	ZZGP/6283 ~~£88~~ £79

PRACTICE EXAMS AQA OCR EDUQAS

3 original practice papers and mark schemes for AS.

Covering every 2015 specification topic between them, this trio of papers uses the same structure and question types used in the real exam.

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

AQA

| AS Paper 2 | ZZGP/6075 £44 |

OCR

| AS Component 1 | ZZGP/6076 £44 |

EDUQAS

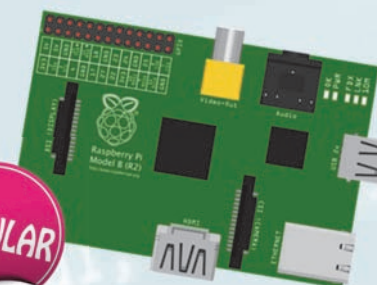| AS Component 1 | ZZGP/6231 £44 |

RASPBERRY PI PROJECTS 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.

POPULAR

The projects:

✓ 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)
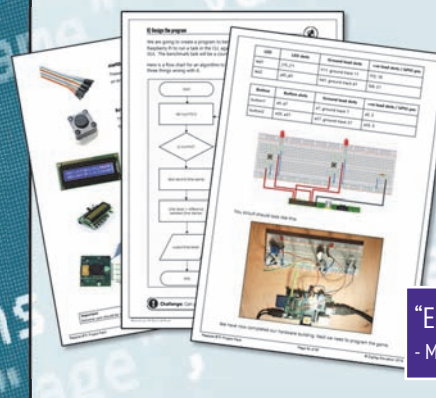
PYTHON PROGRAMMING GUIDE FOR KS4/5

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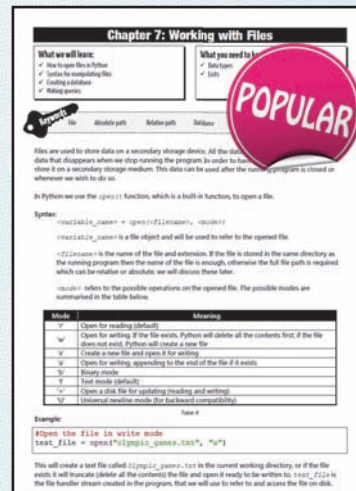
"An excellent resource with clear explanations and a good range of practice tasks with solutions. Both pupils and staff can use it to learn Python." E Grant, HoD and customer

"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

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.
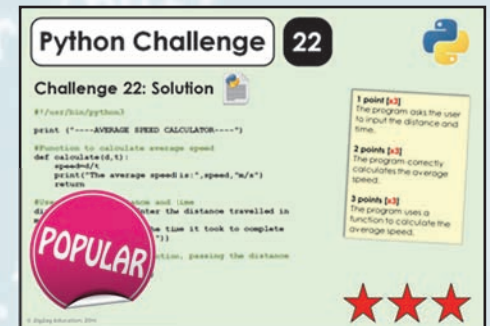
Everything comes in photocopiable and electronic formats:

★ 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!

"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

PROGRAMMING SCRATCH

SCRATCH PROGRAMMING

Ten varied and engaging exercises, each designed to last a single lesson.

As students progress through the exercises, they will gain the skills and knowledge needed to develop their own projects with confidence.

Takes students on a journey from basic introduction through to more complex applications – making it suitable for KS3 and KS4.

The exercises:

★ feature clear, step-by-step instructions and code explanations

★ include extension ideas for differentiation and challenge

✓ are provided as colour PDFs so that they can be placed on a network and followed on screen (includes HTML menu)

✓ include difficulty level, learning objectives and prior knowledge to aid planning

Plus:

✓ Supporting scheme of work to help you plan Scratch lessons!

✓ Worked examples (.sb/.sb2 files) of all projects on CD!
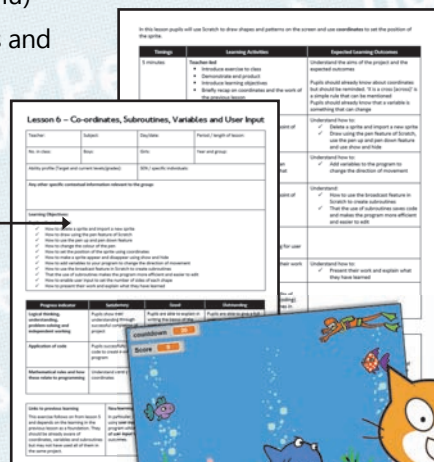
Desktop (v1.4+)	ZZGP/6382	£79+VAT
Cloud (v2.0+)	ZZGP/5979	£79+VAT

PROGRAMMING VISUAL BASIC

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 (backwards compatible with earlier versions)

ZZGP/4925	£69+VAT

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
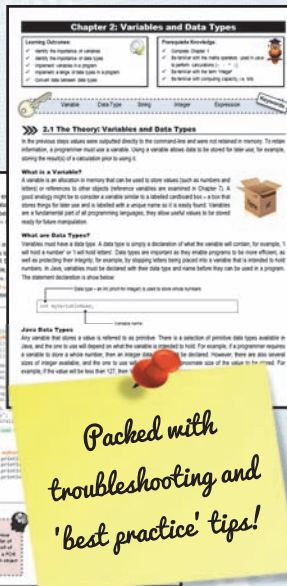
PHP ON A STICK with SQLITE

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

PHP AND MYSQL GUIDE

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

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

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