

SCHOOLWIDE REVISION RESOURCES COMPUTER SCIENCE

Login here

Dear Colleague,

We subscribe to an immensely useful learning and revision resource called SAM Learning. All Teachers and Learners automatically receive a user account to access this comprehensive library of exam board-aligned COMPUTER SCIENCE resources. The service covers 17 subjects and is being used by other departments as part of their revision plans.

Teachers can assign to their class, or individual learners automatically marked activities on topics of their choice. The work appears in the learner's dashboard to be completed by the date set by the teacher.

Each activity provides comprehensive coverage of the selected topic and teachers can see progress reports and knowledge gaps in minutes.

EEF-commissioned the Fischer Family Trust to analyse 300,000 students in 250 schools over 9 years and the report, published in June 2020, showed on average, students who spent 10 or more hours on SAM Learning improved 1 GCSE grade better in 2 different subjects. This is roughly equivalent to a +0.20 P8 improvement.

Have a look – don't worry as it's already paid for! If you have any questions or issues please or feel free to email SAM Learning for an overview of the COMPUTER SCIENCE materials and so they can answer any questions that you or your colleagues may have about the service.

Details of what's included and how to access SAM Learning are on the following pages....

Enjoy!











"I know it improves grades with regular use. I have used SAM Learning for nearly 15 years."

Naomi May. Bullers Wood School for Boys, England.



KEY STAGE 3, GCSE AND IGCSE COMPUTER SCIENCE ACTIVITIES

Login here

Personalise work for your learners - and save time for your teachers

AVAILABLE TO ALL TEACHERS AND LEARNERS

About SAM Learning

We have school-wide access.

All teachers and learners have access to SAM Learning.

The service provides students with access to online interactive activities across all subjects.

The content reflects National Curriculum specifications and is aligned to exam boards.

10,000+ Resources and Activities, Learners can:

- Complete set task activities assigned by teachers
- Independently build knowledge and reinforce prior learning using activities of their choosing
- Be automatically assigned cross-curricular work as an individual, group or class using SAM Learning's adaptive A.I. technology

Automatic Marking and Reporting

SAM Learning's question level analysis identifies knowledge gaps in topics, diagnoses gaps in prior learning before starting a topic, and helps focus teaching and revision to exactly where it is needed.

And, all work is automatically marked for teachers and presented with detailed feedback in our reporting suite.

Improving Outcomes

A 9-year series of impact studies, commissioned by the EEF and completed by the Family Fischer Trust (FFT), found the **impact on student outcomes** (especially at GCSE level) when 10 task hours were completed over an academic year, was equivalent to 1 grade higher for at least 2 GCSE subjects. This is roughly equivalent to a +0.20 P8 improvement.

Market Leadership

We've chosen SAM Learning as a partner because they are highly experienced in the revision space. Reviews rank SAM Learning at the top of 20 subject and learning categories, INCLUDING COMPUTER SCIENCE, with USER RATINGS of GREAT or EXCELLENT by over 93% in the past 6 months on EdTech Impact, in the UK.

Cross-Curricular Samples

Click to view

Sample Activities

- Software +
- Staying Safe Online
- Hardware +
- Inputs and Outputs +
- How Computers Work +

Resource Bank

View Activities

"I know it improves grades with regular use. I have used SAM Learning for nearly 15 years."

Naomi May. Bullers Wood School for Boys, England.



KS3, GCSE and iGCSE Exam Board COMPUTER SCIENCE Coverage

Eduqas	
Algorithms and Programming Constructs	19
Communication	14
Data Structures and Data Types Design	6 2
Development	2
Hardware	23
Impacts of Digital Technology on Society	7
Logical Operations	3
Operating Systems	8
Organisation and Structure of Data	12
Principles of Programming	2
Problem Solving Program Construction	2 7
Programming Languages	3
Security and Authentication	3
Security and Data Management	11
Testing and Evaluation	6
Grand Total	130
WJEC	
Algorithms and Programming Constructs	19
Communication	14
Data Structures and Data Types	6 2
Design Development	2
Hardware	23
Impacts of Digital Technology on Society	7
Logical Operations	3
Organisation and Structure of Data	13
Principles of Programming	2
Problem Solving	2
Program Construction	7
Programming Languages	3
Security and Authentication	3
Security and Data Management	11
System Software	8
System Software Testing and Evaluation	
System Software Testing and Evaluation Grand Total	8
System Software Testing and Evaluation	8
System Software Testing and Evaluation Grand Total iGCSE Cambridge	8 6 131
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving	19 26
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases	8 6 131 19 26 9 7
System Software Testing and Evaluation Grand Total IGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics	8 6 131 19 26 9 7 15
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software	8 6 131 19 26 9 7 15 25
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming	8 6 131 19 26 9 7 15 25
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security	8 6 131 19 26 9 7 15 25
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total	8 6 131 19 26 9 7 15 25 11 4
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel	8 6 131 19 26 9 7 15 25 11 4
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total	8 6 131 19 26 9 7 15 25 11 4
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel Algorithms	8 6 131 19 26 9 7 15 25 11 4 116
System Software Testing and Evaluation Grand Total IGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total IGCSE Edexcel Algorithms Binary	8 6 131 19 26 9 7 15 25 11 4 116 11 4
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel Algorithms Binary Data Representation	8 6 6 131 19 26 9 7 15 25 11 4 116 11 4 2 2
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel Algorithms Binary Data Representation Data Storage and Compression	8 6 131 19 26 9 7 15 25 11 4 116 11 4 2 2 1
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel Algorithms Binary Data Representation Data Storage and Compression Data Types and Structures Decomposition and Abstraction Develop Code	8 6 131 19 266 9 7 7 15 25 111 4 4 116 11 6 1 1 1 1 6 1 1 1 1 1 1
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel Algorithms Binary Data Representation Data Storage and Compression Data Types and Structures Decomposition and Abstraction Develop Code Emerging Trends, Issues and Impacts	8 6 131 19 266 9 7 155 255 11 4 116 11 6 6 1 1 11 14
System Software Testing and Evaluation Grand Total IGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total IGCSE Edexcel Algorithms Binary Data Representation Data Storage and Compression Data Types and Structures Decomposition and Abstraction Develop Code Emerging Trends, Issues and Impacts Hardware	8 6 131 19 26 26 25 11 4 116 11 4 2 2 1 1 11 14 19
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel Algorithms Binary Data Representation Data Storage and Compression Data Types and Structures Decomposition and Abstraction Develop Code Emerging Trends, Issues and Impacts Hardware Input and Output	8 6 131 19 266 9 7 7 15 25 111 4 4 116 11 1 6 6 1 1 11 14 19 4
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel Algorithms Binary Data Representation Data Storage and Compression Data Types and Structures Decomposition and Abstraction Develop Code Emerging Trends, Issues and Impacts Hardware Input and Output Logic	8 6 6 131 19 266 9 7 7 155 25 11 11 1 4 4 2 2 1 1 11 1 14 19 9 4 4 1 1
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel Algorithms Binary Data Representation Data Storage and Compression Data Types and Structures Decomposition and Abstraction Develop Code Emerging Trends, Issues and Impacts Hardware Input and Output	8 6 131 19 266 9 7 7 15 25 111 4 4 116 11 1 6 6 1 1 11 14 19 4
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel Algorithms Binary Data Representation Data Storage and Compression Data Types and Structures Decomposition and Abstraction Develop Code Emerging Trends, Issues and Impacts Hardware Input and Output Logic Machines and Computational Modelling	8 6 131 19 266 9 7 7 155 255 111 4 4 12 2 1 1 11 14 19 4 4 1 1 6 6
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel Algorithms Binary Data Representation Data Storage and Compression Data Types and Structures Decomposition and Abstraction Develop Code Emerging Trends, Issues and Impacts Hardware Input and Output Logic Machines and Computational Modelling Network Security	8 6 131 19 266 99 77 155 25 111 4 4 116 11 11 14 119 4 4 1 1 6 6 4 4 9 2 2
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel Algorithms Binary Data Representation Data Storage and Compression Data Types and Structures Decomposition and Abstraction Develop Code Emerging Trends, Issues and Impacts Hardware Input and Output Logic Machines and Computational Modelling Networks Operators Programming Languages	8 6 6 131 19 266 9 7 7 155 255 111 4 4 116 6 1 1 11 14 19 9 4 4 9 9 2 2 2 2 2
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel Algorithms Binary Data Representation Data Storage and Compression Data Types and Structures Decomposition and Abstraction Develop Code Emerging Trends, Issues and Impacts Hardware Input and Output Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software	8 6 6 131 19 26 6 9 7 7 15 25 11 1 4 4 2 2 1 1 1 1 1 4 4 1 1 1 1 1 6 6 4 4 9 9 2 2 2 4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1
System Software Testing and Evaluation Grand Total iGCSE Cambridge Algorithm Design and Problem Solving Communication and Internet Technologies Data Representation Databases Ethics Hardware and Software Programming Security Grand Total iGCSE Edexcel Algorithms Binary Data Representation Data Storage and Compression Data Types and Structures Decomposition and Abstraction Develop Code Emerging Trends, Issues and Impacts Hardware Input and Output Logic Machines and Computational Modelling Networks Operators Programming Languages	8 6 6 131 19 266 9 7 7 155 255 111 4 4 116 6 1 1 11 14 19 9 4 4 9 9 2 2 2 2 2

Algorithms	-
	1
Binary Arithmetic Boolean Logic	
Character Encoding	
Classification of Programming Languages	
Cyber Security Threats and Methods of Prevention	
Data Compression	
Data Types and Structures	
Design	
Ethical, Legal and Environmental Impacts Hardware and Software	
Implementation	
Inputs, Outputs and File Handling	
Network Security	
Number Bases	
Operations	
Programming Concepts	
Protocols	
Representing Images and Sound	
Software Classification	
String Handling Operations in a Programming Langua	
Subroutines	1
Systems Architecture Testing and Evaluation	
Types of Network	1
Units of Information	
Grand Total	12
Edexcel	
Algorithms	1
Binary	
Data Representation	
Data Storage and Compression	
Data Types and Structures	
Databases	
Decomposition and Abstraction Design	
Develop Code	
Emerging Trends, Issues and Impact	
Hardware	1
mplementation	
•	
nputs and Outputs	
Inputs and Outputs Logic	
Logic Machines and Computational Modelling	
Logic Machines and Computational Modelling Network Security	
Logic Machines and Computational Modelling Network Security Networks	
Logic Machines and Computational Modelling Network Security Networks Operators	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web	10
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web	10
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Stand Total DCR	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Grand Total DCR Algorithms	10:
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Stand Total DCR	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Strand Total DCR Algorithms Analysis	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Grand Total DCR Algorithms Analysis Computational Logic	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Grand Total DCR Algorithms Analysis Computational Logic Computational Thinking, Algorithms and Programmi Data Representation Development	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Grand Total OCR Algorithms Analysis Computational Logic Computational Thinking, Algorithms and Programmi Data Representation Development Ethical, Legal, Cultural and Environmental Concerns	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Strand Total DCR Algorithms Analysis Computational Logic Computational Thinking, Algorithms and Programmi Data Representation Development Ethical, Legal, Cultural and Environmental Concerns Memory	
Logic Machines and Computational Modelling Network Security Networks Departors Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Grand Total DCR Algorithms Analysis Computational Logic Computational Thinking, Algorithms and Programmi Data Representation Development Ethical, Legal, Cultural and Environmental Concerns Memory Network Topologies, Protocols and Layers	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Grand Total DCR Algorithms Analysis Computational Logic Computational Thinking, Algorithms and Programmi Data Representation Development Ethical, Legal, Cultural and Environmental Concerns Memory Network Topologies, Protocols and Layers Producing Robust Programs	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Grand Total DCR Algorithms Analysis Computational Logic Computational Thinking, Algorithms and Programmi Data Representation Development Ethical, Legal, Cultural and Environmental Concerns Memory Network Topologies, Protocols and Layers Producing Robust Programs Programming Techniques	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Grand Total OCR Algorithms Analysis Computational Logic Computational Thinking, Algorithms and Programmi Data Representation Development Ethical, Legal, Cultural and Environmental Concerns Memory Network Topologies, Protocols and Layers Producing Robust Programs Programming Techniques Storage	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Strand Total DCR Algorithms Analysis Computational Logic Computational Thinking, Algorithms and Programmi Data Representation Development Ethical, Legal, Cultural and Environmental Concerns Memory Network Topologies, Protocols and Layers Producing Robust Programs Programming Techniques Storage System Security	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Grand Total DCR Algorithms Analysis Computational Logic Computational Thinking, Algorithms and Programmi Data Representation Development Ethical, Legal, Cultural and Environmental Concerns Memory Network Topologies, Protocols and Layers Producing Robust Programs Programming Techniques Storage System Security System Software Systems Architecture	
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Grand Total DCR Algorithms Analysis Computational Logic Computational Thinking, Algorithms and Programmi Data Representation Development Ethical, Legal, Cultural and Environmental Concerns Memory Network Topologies, Protocols and Layers Producing Robust Programs Programming Techniques Storage System Security System Software Systems Architecture Translators and Facilities of Language	1
Logic Machines and Computational Modelling Network Security Networks Operators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Grand Total OCR Algorithms Analysis Computational Logic Computational Thinking, Algorithms and Programmi Data Representation Development Ethical, Legal, Cultural and Environmental Concerns Memory Network Topologies, Protocols and Layers Producing Robust Programs Programming Techniques Storage System Security System Security Systems Architecture Translators and Facilities of Language Wired and Wireless Networks	1
Logic Machines and Computational Modelling Network Security Networks Deparators Programming Languages Software Subprograms Testing, Refining and Evaluation The Internet and the World Wide Web Grand Total DCR Algorithms Analysis Computational Logic Computational Thinking, Algorithms and Programmi Data Representation Development Ethical, Legal, Cultural and Environmental Concerns Memory Network Topologies, Protocols and Layers Producing Robust Programs Programming Techniques Storage System Security System Software	1

Key Stage 3 Computing	
Computer Systems	18
Control & Simulation	6
Creativity & ICT	20
Database Systems	10
Digital Data/Systems	7
Digital Items	10
E-Safety/Computer Security	11
ICT and Society	5
Networks & Communication	12
Programming	15
Spreadsheet Systems	14
Grand Total	128

Activities generally take 10-15 minutes to complete or are timed activities to simulate an exam setting. Activities are automatically marked, can be assigned to your class or a group of pupils, and tightly focused on quickly assessing knowledge and gaps. Activities include:

- Revision Question Banks
- Test Questions
- Exam Papers



Account Access and Support Details

Teacher Accounts

Go to https://platform.samlearning.com

Enter your login details & click sign in

Any problems? You will need to contact SAM Learning directly. Go to the <u>Forgotten your Teacher Login page</u> and fill in the form for them to resolve it.

Teachers can identify learner user ID's by logging into their teacher account and clicking Learners off the top navigation bar. This page contains a user ID column.

Login here

Learner Accounts

Go to https://platform.samlearning.com

User ID - a learner's user ID is typically their school email address. Where a Learner has no school email address it will be their six-digit DOB followed by their initials. I.E. Sam Large 01.01.21, the ID would be 010101SL

Password - a learner's password is typically their school email address. Where a Learner has no school email address it will be their six-digit DOB followed by their initials. I.E. If Sam Large was born on 1st January 2001, the user ID would be 010101SL

Centre ID - the Centre ID is a unique identifier assigned to each school. The 'Can't log in?' feature is available.

Service Support

Brief CPD Videos (links enclosed) are available or feel free to <u>email</u> SAM Learning for an overview of the geography materials so they can answer any questions that you or your colleagues may have about the service.



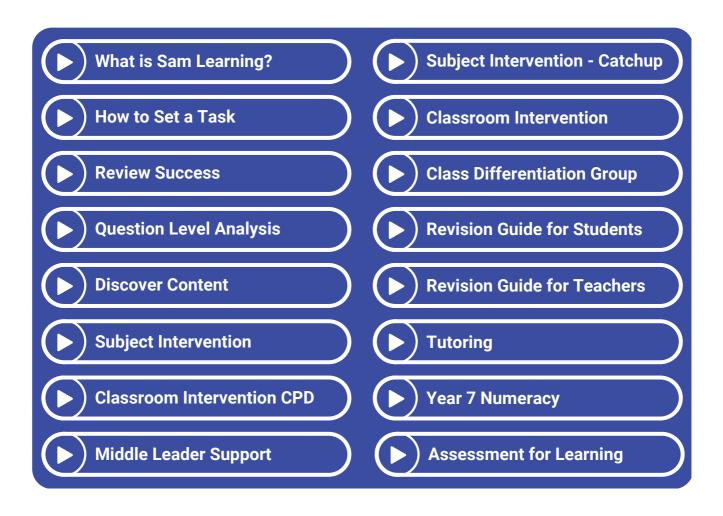
sst@samlearning.com



0845 130 4160



Quick Start Videos





sst@samlearning.com



0845 130 4160









