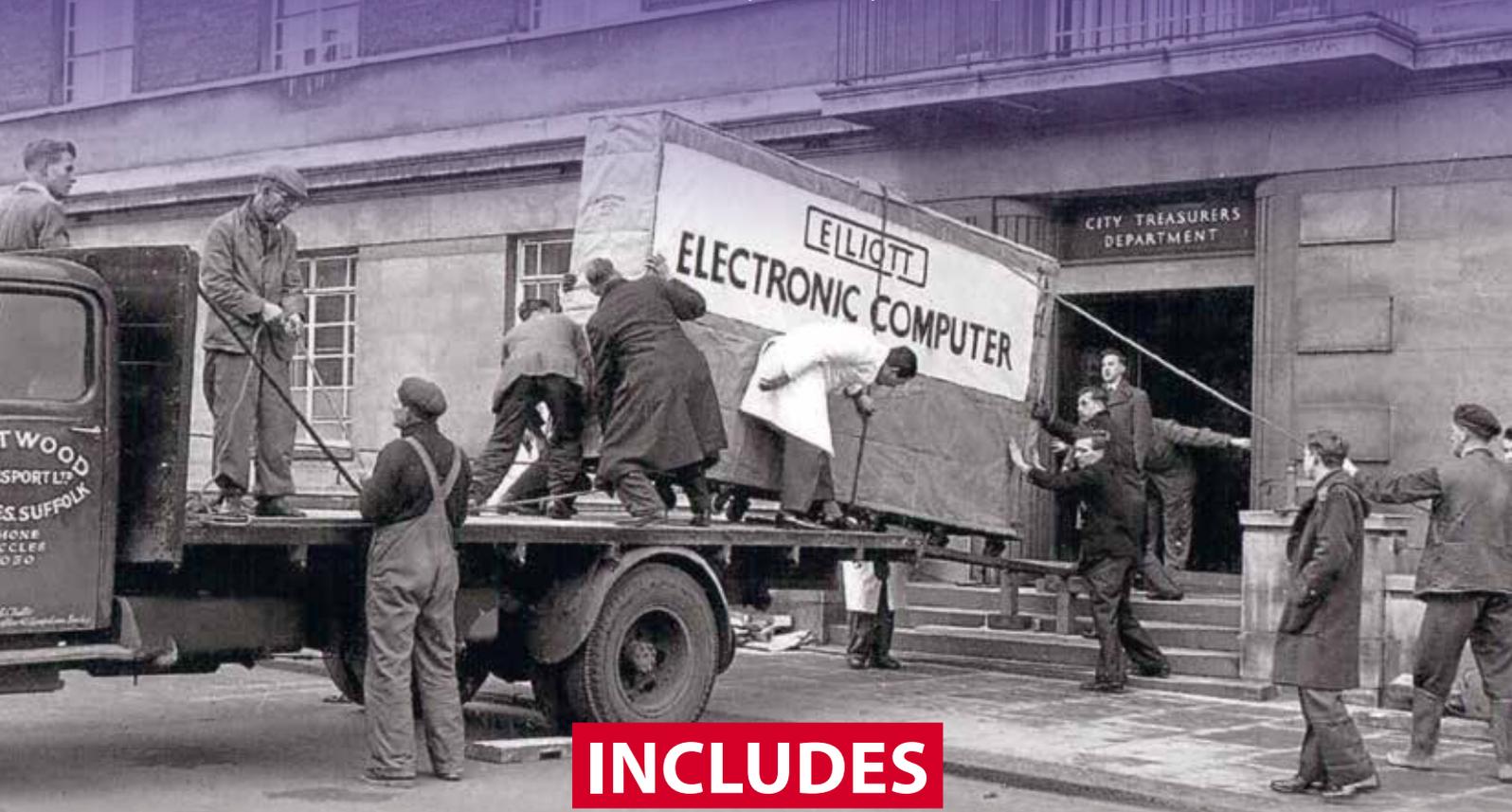


**LONDON**  
GRID FOR LEARNING

**COMPUTING AT SCHOOL**  
EDUCATE · ENGAGE · ENCOURAGE  
Part of BCS – The Chartered Institute for IT

# COMPUTING RESOURCES FROM LGfL

Computing has always been an LGfL strength, but like CAS, we look to develop unique resources that reach the parts other providers simply can't reach. Read on to find out more – you maybe surprised what we offer.



**INCLUDES**  
**A HISTORY OF COMPUTING**

## AWARD-WINNING J2CODE

j2code is available nationwide, but the beauty of using it in an LGfL school is full integration into the j2e Tool Suite.



**+ ONLINE-SAFETY SUPPORT & WIDGIT SYMBOLS**



## J2CODE

Starting from Scratch? You don't have to, with j2code's full curriculum coverage. But you can, thanks to new Scratch integration.

This coding resource from the makers of the j2e Tool Suite is a Bett Award winner, and with good reason. An intuitive interface brings together three platforms (JIT, visual and logo), which are ideal for lower KS3 classes.

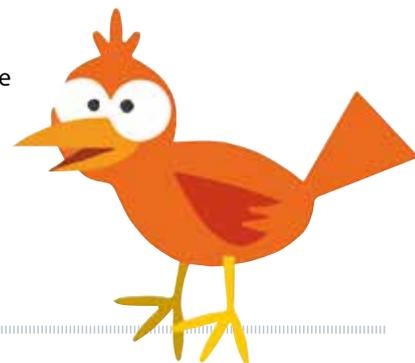
Couple this with lesson plans, help videos and Scratch integration to make the best of both worlds, and you begin to understand the scope of the package.

The drag-and-drop building-block format will be familiar to users of Scratch, making the already user-friendly and engaging tool even more accessible.

j2code is available nationwide, but the beauty of using it in an LGfL school is full integration into the j2e Tool Suite: you can save, embed and write about your work, and then even blog about it (why? See Blog Central; how? All the tools are in j2launch).



**j2launch.lgfl.net**  
**blogcentral.lgfl.net**



## WEBTECH TUTOR

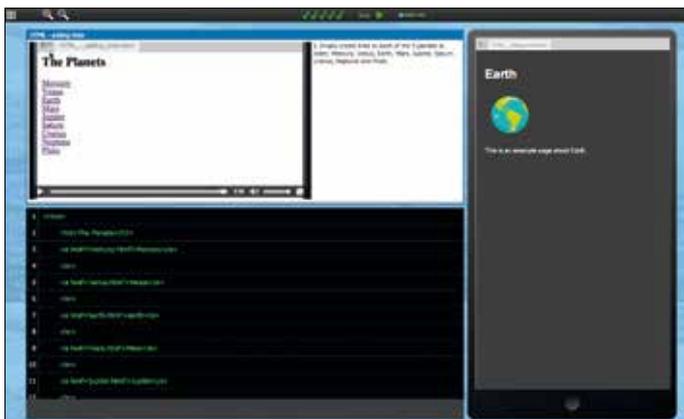
Waking up in a cold sweat at the thought of teaching coding? No longer! If you can drag and drop, or spot the difference between two sentences, you can learn HTML.

The natural progression for KS3 pupils finished with j2code and Scratch is to move onto the LGfL WebTech Tutor.

While the thought of teaching HTML, JavaScript and CSS might cause some concern (imagine a chorus of "It doesn't work" as pupils miss a bracket and break the syntax), WebTech Tutor addresses these concerns in a highly-innovative way.

The package is broken down into bite-sized, easily-achievable modules, with a short video walkthrough for each section that can be replayed if necessary. Drag-and-drop functionality allows pupils to get to grips with the concepts, terms and syntax without being frustrated by broken code.

When the crucial skill of debugging is introduced, it is manageable for all: the code doesn't change, but the English (e.g. "Hello World.") must be typed accurately – did you notice the capital H/W in the example, or the full stop? This prepares pupils for taking the plunge into free code in later modules.



**webtech.lgfl.net**

# PYTHON TUTOR

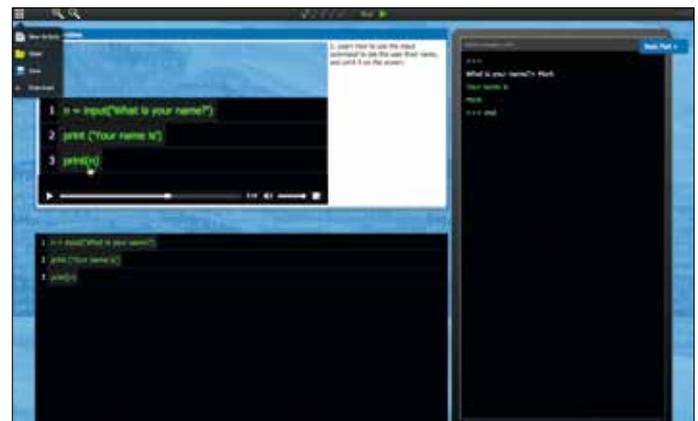
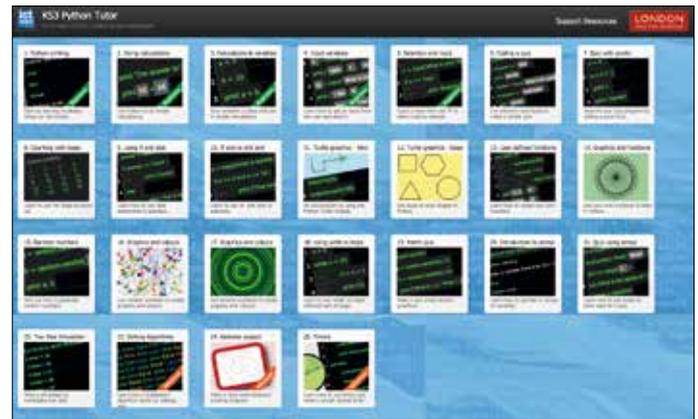
KS3/4: Two years on from the introduction of Computing to the National Curriculum, this resource adds variety to the languages available by introducing students to the object-oriented programming of Python.

Expert teaching within an interactive, supportive environment will allow teachers with no previous experience of the Python language to use it to meet the coding requirements of the Key Stage 3 curriculum.

The package includes 25 different coding concepts, presented one standalone lesson at a time. Students' understanding is initially developed at a conceptual level by allowing them to drag and drop elements of code. They can then refine their skills with more advanced activities on code-creation later in the resource.

Students begin by watching a short introductory video, which presents a new coding concept or problem. They then carry out a series of related short tasks, after which Python Tutor presents them with increasingly-difficult follow-up activities.

[python.lgfl.net](http://python.lgfl.net)



# HISTORY OF COMPUTING (CONCEPTS)

KS5: The cross-stage History of Computing resource has a dedicated A-Level section on Computing Concepts.

Do your students know how to count in binary? Do they know their ASCII from their hexadecimal? Can they use logic gates, and simplify logic into algebra?

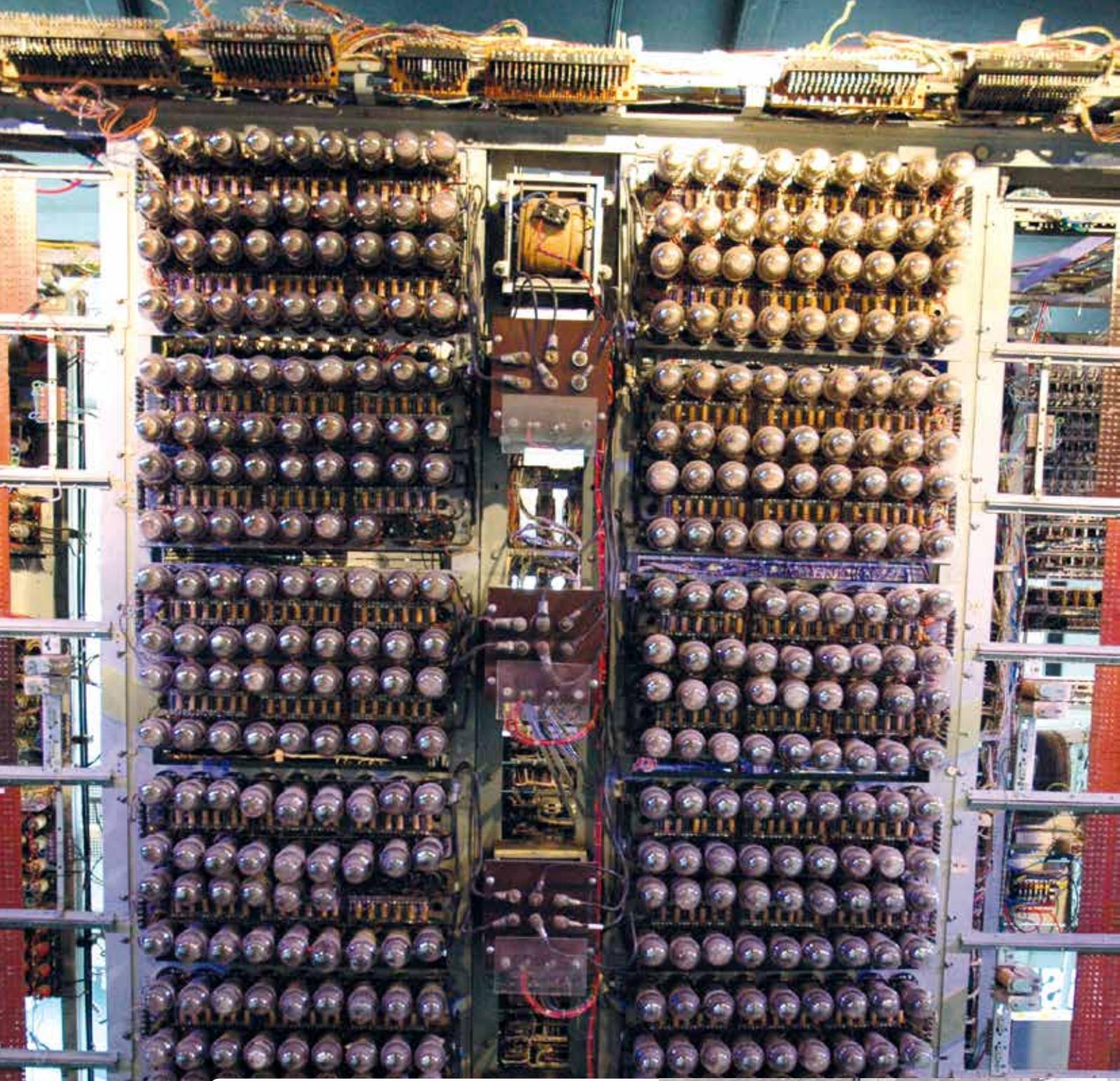
With the 'History of Computing' module on Computing Concepts, they soon will be able to. Videos, lesson plans and presentations help teachers and students to explore the Key Stage 5 requirements of the Computing curriculum, and to understand how British Computing developments have influenced our world.

The resource was designed and made in partnership with experts from the National Museum of Computing at Bletchley Park.

Read more on pages 22-23.

[computingconcepts.lgfl.net](http://computingconcepts.lgfl.net)





## **DID YOU KNOW?**

Learn more about the Elliott 803

**The Elliott 803 was one of the first ever mass-produced (over 200) computers. Before this time, you would have to build one yourself. The Elliott was so large that it was delivered in several lorryloads. Here it is (or rather one part of it) being delivered in 1961.**



# A HISTORY OF COMPUTING

Playing the ‘imitation game’ – helping the developers of tomorrow understand the relevance of lessons learned by the pioneers of computing.

Winner of the 2014 Bett Award for best Digital Collection and Resource Bank, The History of Computing has become one of the most popular resources available from LGfL.

Importantly, it is not an attempt to provide blanket coverage of the entire new Computing National Curriculum, but to offer a unique insight into the people and products that formed the bedrock of modern computing.

Produced in partnership with and on location at The National Museum of Computing, Bletchley Park, and Manchester’s Museum of Science and Industry, this resource features

## DID YOU KNOW?

**Colossus (main image) was one of the first-ever electronic computers. It was built to break German coded messages during WW2 and would easily fill a large room.**

video footage and high-resolution photographs of many of the iconic British computing systems used since 1940, including the Colossus Mark II system – restored to full working order.

For each system, Input, Processing, Storage and Output are deconstructed and placed within a societal context, and experts explain how the systems function and what role they played in advancing our work and leisure activities.

Resources include learning support material for the revised Computing National Curriculum and Key Stages 2-5.

The History of Computing aims to show that an understanding of our digital heritage is critical for shaping our digital future.

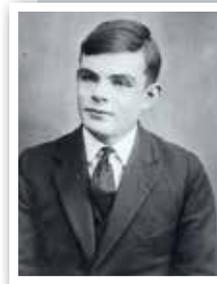
British computing developments have significantly influenced the world we live in. These unique materials show how home-grown innovations continue to impact on our world today and shape all of our tomorrows.

[hoc.lgfl.net](http://hoc.lgfl.net)

## PEOPLE OF INTEREST

Learn more about the people behind the development of modern-day computing

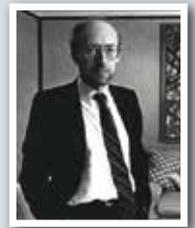
**Tommy Flowers**  
designed and built Colossus



**Alan Turing**  
is regarded as the founder of computer science

**Sir Clive Sinclair**

invented the first affordable electronic pocket calculators and home computer



## OBJECTS OF INTEREST

Learn more about computers

**Tape reader**  
for the Elliott 803. Used to input data on perforated paper



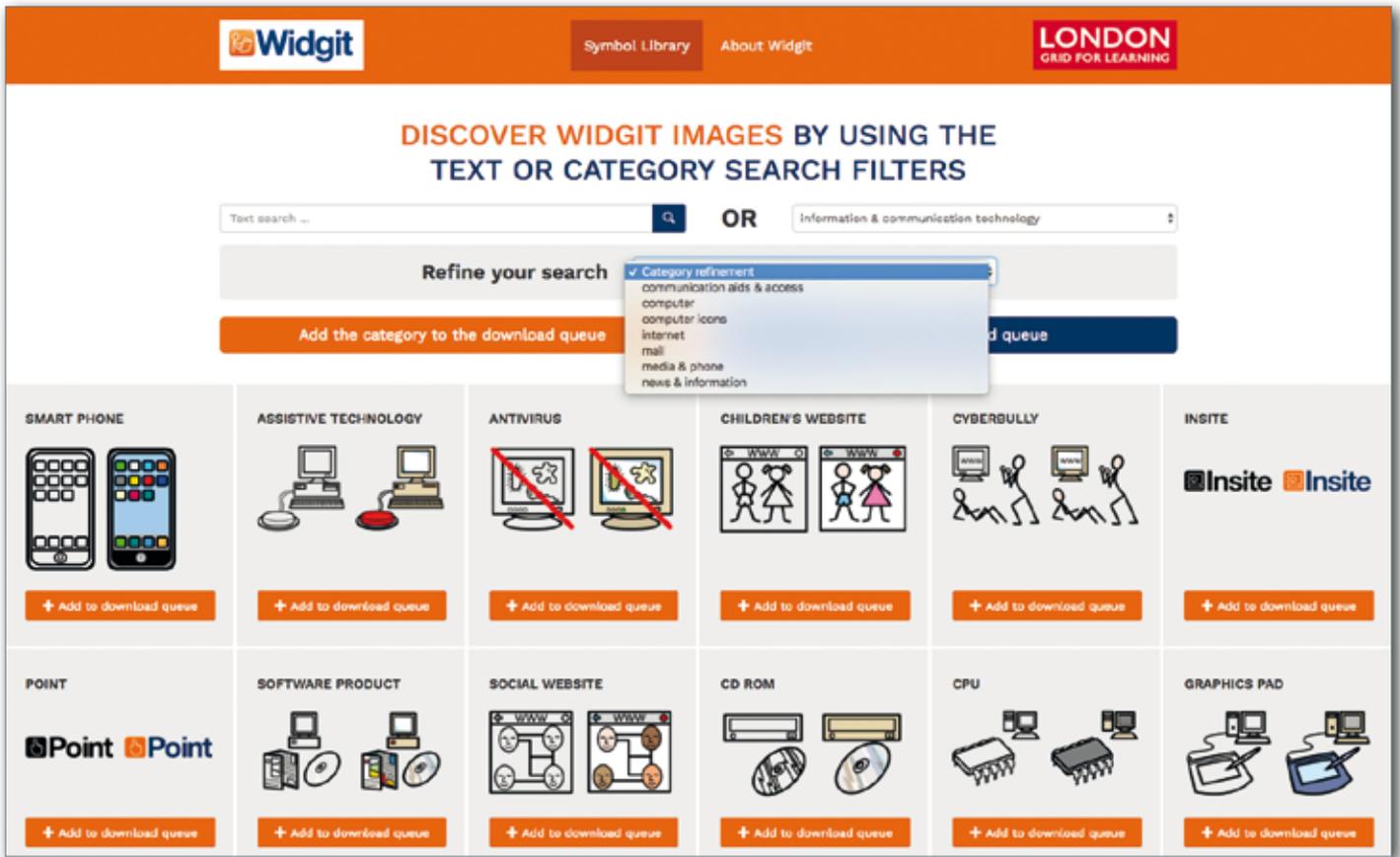
**ICL mainframe data storage disk**

**Teleprinter**  
with Colossus for outputting readable results



**Sinclair ZX Spectrum**





## WIDGIT

LGfL and TrustNet schools have access to the full range of Widgit symbols to help all pupils access and understand information presented to them and to support communication.

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The Widgit symbol library on

LGfL contains a range of Information and Technology symbols within the following categories:

- Communication Aids and Access
- Media and Phone
- Computer

- Internet
- Computer Icons
- Mail
- News and Information

Staff supporting learners with a range of language and communication needs can use these symbols in their resources as well as in the classroom environment to help pupils access ICT related vocabulary and aspects the computing curriculum. This enables more inclusive access to ICT in schools.

[widgit.lgfl.net](http://widgit.lgfl.net)



# ONLINE-SAFETY PORTAL

Comprehensive database of online-safety resources from a range of providers, for teachers, school leaders and parents. Policy templates, flyers, posters, handouts, guidance, audits, schemes of work, lesson plans and much more...

**os.lgfl.net**

## WHAT'S INCLUDED

Collated, curated (and sometimes even created!) by the LGfL Safeguarding Board, os.lgfl.net spans the entire online-safety spectrum.

- Sexting / Messaging
- Safe Surfing
- Pornography
- Child Sexual Exploitation
- Reporting
- Social Networking
- Grooming
- Gaming
- Downloading
- Bullying
- Online Privacy
- Online Identity
- Extremism / Radicalisation
- British Values
- EAL Support
- Parental Engagement
- Lesson Resources / Plans, SOW
- Staff Training / CPD Support
- One-Minute Guides
- Ofsted / DfE / Official Documents
- Data Security
- Equipment Security



RESOURCE CENTRE



COUNTER-EXTREMISM



RESEARCH / REPORTS



PARENTAL ENGAGEMENT



POLICIES / AGREEMENTS



ONE-MINUTE GUIDES



# LEARN MORE WITH LGfL



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**SUPPORT**  
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