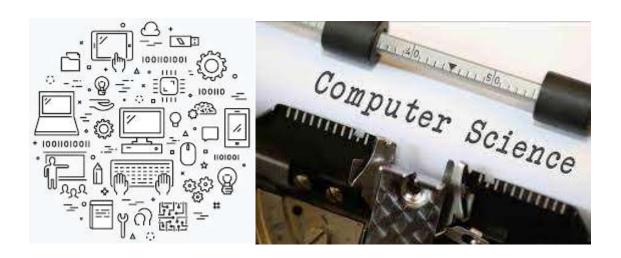


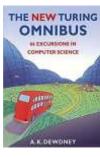
# KS4 Supercurricular COMPUTING

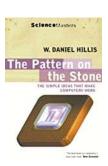


For up to date information on supercurricular opportunitities in Computing join the department's Computing Society Google Classroom by emailing your Computing teacher and follow the department Twitter feed (@kech\_compsci).

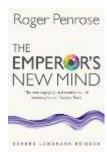
### Reading











Computational Fairy Tales, J. Kubica 978-1477550298

The new Turing Omnibus: 66 Excursions in Computer Science, A.K. Dewdney 978-0805071665

The Pattern on the Stone: The Simple Ideas that Make Computers Work, D.Hillis

Computing with Quantum Cats, J. Gribbin 978-0552779319

The Emperor's New Mind, R. Penrose 978-0198784920

## Listening and viewing

BBC Click <a href="https://www.youtube.com/c/BBCClick/videos?app=de">https://www.youtube.com/c/BBCClick/videos?app=de</a>

sktop

Computerphile https://www.youtube.com/user/Computerphile?app=d

esktop

Inventions that changed the world <a href="https://www.youtube.com/watch?v=rTsHnxS5bg0">https://www.youtube.com/watch?v=rTsHnxS5bg0</a>

Carrie Anne Philbin: Crash course in Computer

**Science** 

https://www.youtube.com/watch?v=tplctyqH29Q&list =PLq0Imqvdtkf50DOOpC47G5MXTc3GxUFC4

TED Technology <a href="https://www.ted.com/topics/technology">https://www.ted.com/topics/technology</a>

This Week in Tech podcast <a href="https://podcasts.apple.com/us/podcast/this-week-in-">https://podcasts.apple.com/us/podcast/this-week-in-</a>

tech-video-large/id358612594

Oxford University Computer Science podcasts https://podcasts.ox.ac.uk/series/computer-science

Stack Overflow podcast <a href="https://stackoverflow.blog/podcast/">https://stackoverflow.blog/podcast/</a>

Mr Brown CS <a href="https://www.youtube.com/channel/UCsBxhDfwURg-">https://www.youtube.com/channel/UCsBxhDfwURg-</a>

vQASN2ZeHwg

New Scientist - Tech pages <a href="https://www.newscientist.com/subject/technology/">https://www.newscientist.com/subject/technology/</a>

### **Competitions**





Bebras (all years, open to all)

TCS Oxford (all years, qualify via Bebras)

**Braben Cup (team based, Python programming)** 

**British Informatics Olympiad\*** 

Challenge.bebras.uk

Challenge.bebras.uk

Persecoding.com

https://www.olympiad.org.uk/

### Resources

Learn HTML/CSS/Python W3schools.co.uk

BBC Bitesite <a href="https://www.bbc.co.uk/bitesize/subjects/z34k7ty">https://www.bbc.co.uk/bitesize/subjects/z34k7ty</a>

CAS TV <a href="https://www.youtube.com/user/computingatschool/vi">https://www.youtube.com/user/computingatschool/vi</a>

deos

Stack Overflow <a href="https://stackoverflow.com/">https://stackoverflow.com/</a>

MIT Intro to CS and Programming <a href="https://www.edx.org/course/introduction-to-">https://www.edx.org/course/introduction-to-</a>

computer-science-and-programming-7

EDX programming / CS <a href="https://www.edx.org/learn/computer-programming">https://www.edx.org/learn/computer-programming</a>

Note: Some of the above may be blocked inside school.

<sup>\*</sup> The Olympiad is technically difficult, but a great combination of maths and computer-based problem solving.

# **Following**

@kech\_compsci @guardiantech

@SchoolCoders @BBCTech

@BBCClick @Codecademy

@TheGadgetShow @CompSciFact

# **Doing**

National Museum of Computing <u>Tnmoc.org.uk</u>

CyberFirst Defenders & Futures <a href="https://www.ncsc.gov.uk/section/education-">https://www.ncsc.gov.uk/section/education-</a>

skills/schools

Codecademy <u>https://www.codecademy.com/catalog</u>

CyberFirst Advanced <a href="https://www.ncsc.gov.uk/section/education-">https://www.ncsc.gov.uk/section/education-</a>

skills/schools