

# KEY STAGE 3 ROADMAP



**7.2 Binary Numbers**  
Learn how a computer understands and represents numbers.

**7.4 DVD Cover**  
Research, design, make and evaluate a DVD cover. You will also develop DTP skills.

**7.6 Scratch**  
Create simple programs while using the tools you learned about in the Python Unit.

**8.1 Boolean Logic**  
Use True/False statements and operators (AND, OR, NOT, XOR) to evaluate logic.

START



Bebras Challenge

YEAR 7

**7.1 Emails and networks**  
Learn why the school uses a network and how it works.

**7.3 Intro to Python**  
Make a chatbot to learn the basics of programming (Telling the computer what to do).

**7.5 Spreadsheets**  
Learn the features of one of the most widely used type of programs and how to model data.

**8.2 Technology**  
Learn about software, hardware, the internet and the history of computing.



Bebras Challenge

YEAR 8

**8.6 Searching and Sorting**  
Discover different ways to search and sort through data. Linear/Binary and Bubble/Merge.

Google forms and E-safety

**8.3 Python Programming**  
Recap previous learning while using selection and iteration to further develop your programming skills.

**9.1 The bigger picture**  
Learn about relevant laws and how computers impact on the environment.

**9.3 Python 2**  
Recap and use data structures in your code.

**8.5 Websites and HTML**  
Use software to create a website about a country of your choice.

**8.4 Databases**  
Understand why they are important, make queries etc

**9.7 ICT skills for GCSE**  
Develop your word processing, presentation and spreadsheet software skills.



YEAR 9



Bebras Challenge

**9.2 Networks and the internet**  
Learn about different types of networks and malicious software.

**9.4 Computer Hardware**  
Learn about internal computer components and how they operate.

**9.5 Cybersecurity**  
Learn more about threats to computer systems and how we can minimise these risks.

**9.6 Binary images and sound**  
Learn how a computer interprets and represents digital images/sound.

