



Design and Technology Topic Overview: Programming pioneers

Previous linked learning	I think I already know...	I would like to find out...
<p>Year 3</p> <p>British Inventors</p> <ul style="list-style-type: none"> • I can explain about the invention of the mackintosh. • I can investigate ways of making fabric waterproof. • I can explain about the invention of the world wide web. • I can describe how the invention of the internet has changed the world. <p>Year 4</p> <p>Light Up Signs</p> <ul style="list-style-type: none"> • I can explore and analyse illuminated signs. • I can create a simple circuit with incandescent bulbs and a switch. • I can describe the difference between an LED and an incandescent light bulb. <p>Year 5</p> <p>Chinese Inventions</p> <ul style="list-style-type: none"> • I can explain how the invention of paper helped shape the world. • I can explain the traditional method for making paper. • I can test a variety of types of paper for strength, absorbency, opacity, etc. • I can make recycled paper. 		
<p>Key Vocabulary</p>		



Programming buzzer
Computers prototypes
Products
Complex
Electrical
Algorithms
Diagrams
Hardware
Engineers
Pioneering
Monitor
Debug
CAD software

By the end of this unit, you will be able to...

To explain how computers and computer programs are used in a variety of products.

To develop ideas for a product with an embedded computer system that controls it.

To develop, model and communicate ideas for an embedded system which monitors and controls a door, a room or both.

To develop ideas for a product and start to write programs to monitor and control them.

To model and communicate ideas, using either prototype models or computer-aided design.

To evaluate your design for a computer-controlled system and consider the views of others to improve your work.

