Topics and Lessons

Teach students how to use technology safely, respectfully, responsibly and securely

What is your online identity and how do you protect it?

What is safe practice when accessing websites and opening email attachments?

Explore your digital footprint and how the internet is not anonymous

What are the different dangers online and what should you do to protect yourself?

How do you revise for computer science?

Test and baseline assessment

D.I.R.T and introduction to under the hood

Under the Hood of a Computer

How did computers used to work, compared to how they work now?

What are the different components in a modern computer?

What is binary and where is it used?

From binary to information and a recap so far

What are input and output devices and what are their purposes?

Test

D.I.R.T and introduction to Think Like a Computer Scientist

Think Like a Computer Scientist

What is an algorithm and how do you solve a problem?

What is the link between computer science, art and maths?

How to write an algorithm and program your results (block-based language)

How to write an algorithm and program your results (text-based language)

Recap and practise

Assessment

D.I.R.T and Introduction to animation

Create an Animation

How do you create an animation and what makes a good one?

Plan and design your animation using a storyboard

Create your animation

Create your animation

Evaluate your animation and make improvements (D.I.R.T)

Measure the impact of your animation and self-assess your work

How the Web Works

What is the web? Is it different from the internet?

How is HTML useful and what are the connections on the web?

What should you trust on the web?

Assessment

D.I.R.T and Introduction to webpage creation

Webpage Creation

What is website usability and accessibility?

What are the basic HTML tags and how are they used?

How to set up a webpage, coded in HTML

How to set up a CSS and use it to design your webpage

Finish creating your webpage

Self-assessment and peer evaluation.