

## Topics and Lessons

### Representing Images

What are pixels and pixelated images?  
Explain the difference between different image types  
Explain the difference between different image types  
Steganography, why was it used?  
Recap and assessment  
D.I.R.T and Introduction to Operating Systems

### Operating Systems

What is an operating system and what does it do?  
What are the different types of operating system?  
Compare the different types of operating system  
Assessment  
D.I.R.T and Introduction to Binary

### Binary

Recap of binary from year 7  
You can add binary? How!?  
Use software to provide a tutorial for someone else on an aspect of binary  
Use software to provide a tutorial for someone else on an aspect of binary  
Peer review and recap  
Assessment  
D.I.R.T and Introduction to Boolean Expressions

### Boolean Expressions

Using selection to make decisions, how can you do it?  
How to nest if statements and why you would want to!  
How to use Boolean logic to making your code more efficient  
Recap and practise of Boolean logic

Assessment

D.I.R.T and Introduction to Connecting to the Internet

### **Connecting to the Internet**

How do devices connect to the internet in modern times?

What is the different between a LAN and a WAN and what that means

Circuit switching vs packet switching and the differences they make

What is an IP address and how you probably use one every day!

Assessment

D.I.R.T and Introduction to Searching and Sorting Algorithms

### **Sorted!**

What are sorting algorithms and why are they important?

How to use 3 different sorting algorithms

What are searching algorithms and why are they important?

What is recursion and why is it necessary?

Recap and revision

Assessment

D.I.R.T

BEBRAS - November