Year 7 –	1A: Choice & Selection	1B: Flowol	2A: My Digital World
	2B: Block Programming	3A: Systems Construction	3B: Graphics Editing
Year 8 –	1A: Back to the Future	1B: HTML	2A: Flowgorithms
	2B: Textual Programming	3A: Binary Bits & Bobs	3B: Data Gathering & Analysis

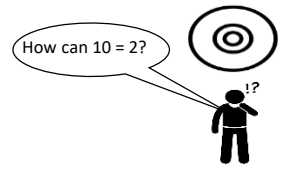
Yavneh College

KS3 Computing & IT – ROAD MAP

EOY 8 test

8.6 Data Gathering & Analysis
What are spreadsheets? What is a hypothesis? What are the key features of a spreadsheet? What is cell referencing? What are formulas? How do you use cell referencing and formulas? Why is formatting important? How do you format your spreadsheet? What is data validation? How do you use data validation? What are functions? How do you use the basic functions in a spreadsheet? What are graphs and charts? How do you generate graphs and charts in a spreadsheet?

8.5 End of Unit Test



8.5 Binary Bits & Bobs
What is binary? How does binary work? How do you convert from denary to binary and vice versa? How do you add binary numbers together? What is ASCII? How does ASCII allow you to represent characters in binary? How do you convert characters to binary and vice versa? How is sound digitised? Manipulating sound using Audacity.

8.3 Flowgorithms
What is a flowchart? What are the basic flowchart symbols? What is a variable? What does it mean to declare a variable? What are decisions? What is iteration? Why should we use iteration? Making flowcharts using sequences, decisions and iteration.

8.3 End of Unit Test

8.4 Textual Programming
What is Python? What are inputs and outputs in programming? Developing programs using inputs and outputs. What are data types? What are the basic data types? How do I convert between different data types? What are the basic arithmetic operators? Developing programs using arithmetic operators. What is selection? Developing programs using selection.

8.4 End of Unit Test

8.2 HTML
What is HTML? How is HTML used to make websites? What does text formatting mean? Developing websites that use formatting and images. What are hyperlinks? Developing websites that use hyperlinks.

8.1 End of Unit Test

8.1 Back to the Future
Who are Alan Turing, Sir Tim Berners Lee, George Boole, Charles Babbage and Ada Lovelace? What was their impact on computer science? What is encryption? How do you encrypt and decrypt messages? What is HTML? What is the Web? How do you write simple HTML? What is Boolean logic? What are logic gates and truth tables? What is problem solving and how do you use it?

YEAR 8 KS3

8.2 End of Unit Test

7.6 Graphics Editing
What is a digital image? How is a digital image made? What makes a digital image become pixelated? What is pixel depth? How many bits do you need to store colour? How do you use RGB values to mix any colour? How are images edited? Edit images using the healing brush and content aware scale in Photoshop. What are layers in images? Edit images using auto tone, auto colour and auto contrast in Photoshop.

Introduction
Scheme of Learning. Course calendar. Where to find resources. Folder Setup. Workbooks. Homework calendar. Student/Teacher expectations. What is computer science?

7.5 End of Unit Test

7.5 Systems Construction
How do computers understand instructions? What makes something a computer? What are the main components of a computer? What is the purpose of these different components? How do these components work together? What is the CPU? How does the CPU work? How do you measure the performance of the CPU?

7.3 End of Unit Test

7.3 My Digital World
What is copyright law? How do you apply the law to different scenarios? What is your digital footprint? How can you reduce yout digital footprint? Are there ways of using social media safely? What is cyber abuse? What are the strategies you should use if you encounter cyber abuse? What are phishing emails? How do you identify phishing emails? What is hacking? What can you do to protect yourself against being hacked?

EOY 7 test

7.4 End of Unit Test

7.4 Block Programming
What are the key components of a computer game? Developing Kodu programs using "When-Do" commands. Why are landscapes important in games? Developing a landscape in Kodu. What is the difference between manual and automatic navigation? Developing Kodu programs that use manual and automatic navigation. What is the difference between clones and creatables? Developing Kodu programs that use clones and creatables.

7.2 End of Unit Test

7.2 Flowol
What is a flowchart? What are the basic flowchart symbols? What is a sequence? What are decisions? What are sensors and where can they be used? What are subroutines and how do they make programs more efficient? Making flowcharts using sequences, decisions and subroutines.

YEAR 7 KS3

START OF KS3

Introduction
Scheme of Learning. Course calendar. Where to find resources. Folder Setup. Workbooks. Homework calendar. Student/Teacher expectations. What is computer science?

7.1 Choice & Selection
What are folders and files? How do you organise your work on a computer? How do you send emails? What makes an email more formal? How do you know which software to use? What are the common tools in different software? How do you use search effectively to conduct research?

7.1 End of Unit Test