

KS3 COMPUTING - Curriculum Path

Year
7

Autumn 1

GAME CREATION: KODU



Algorithms, sequence,
selection, program

Autumn 2

BUILD A COMPUTER



Inputs, outputs,
storage, hardware,
software, CPU and
RAM

Spring 1

DIGITAL CITIZENSHIP



Digital footprint,
cyberbullying,
Phishing, privacy, fake
news

Spring 2

DIGITAL CITIZENSHIP



Digital footprint,
cyberbullying,
Phishing, privacy, fake
news

Summer 1

PROGRAMMING WITH SCRATCH



Algorithm, variable,
sequence, selection,
Iteration

Summer 2

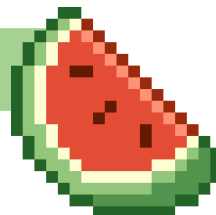
PHYSICAL COMPUTING



Algorithm, variable,
sequence, selection,
program

Year
8

IMAGE EDITING



Bitmap, pixels,
selection tool, clone,
filter, layers, file
format, export

MODELLING DATA



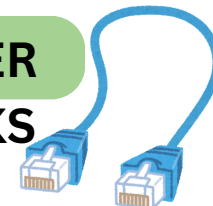
Cells, cell reference,
formula, function,
graphs and charts, if
statements, format

PROGRAMMING WITH SCRATCH



Algorithm, variable,
sequence, selection,
Iteration

COMPUTER NETWORKS



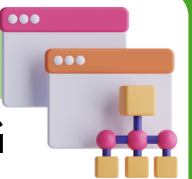
LAN, WAN, server, client,
router, switch, internet,
data packet,
transmission media

VECTOR GRAPHICS



Shapes, layers, fill,
stroke

PHYSICAL COMPUTING



Algorithm, variable,
sequence, selection,
program

Year
9

PYTHON PROGRAMMING



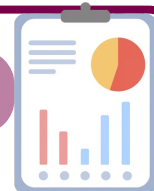
Algorithm, variable,
sequence, selection,
Iteration, lists, program,
string, integer

DATA



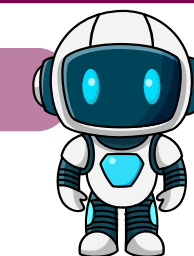
Binary, denary,
hexadecimal, bitmap,
pixels, resolution,
colour depth,
character set

DATA



Binary, denary,
hexadecimal, bitmap,
pixels, resolution,
colour depth,
character set

AI



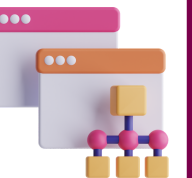
Model, data driven,
rule based, generative
AI, machine learning,

CYBER- SECURITY



Machine learning,
supervised,
unsupervised,
reinforcement

PHYSICAL COMPUTING



Algorithm, variable,
sequence, selection,
program