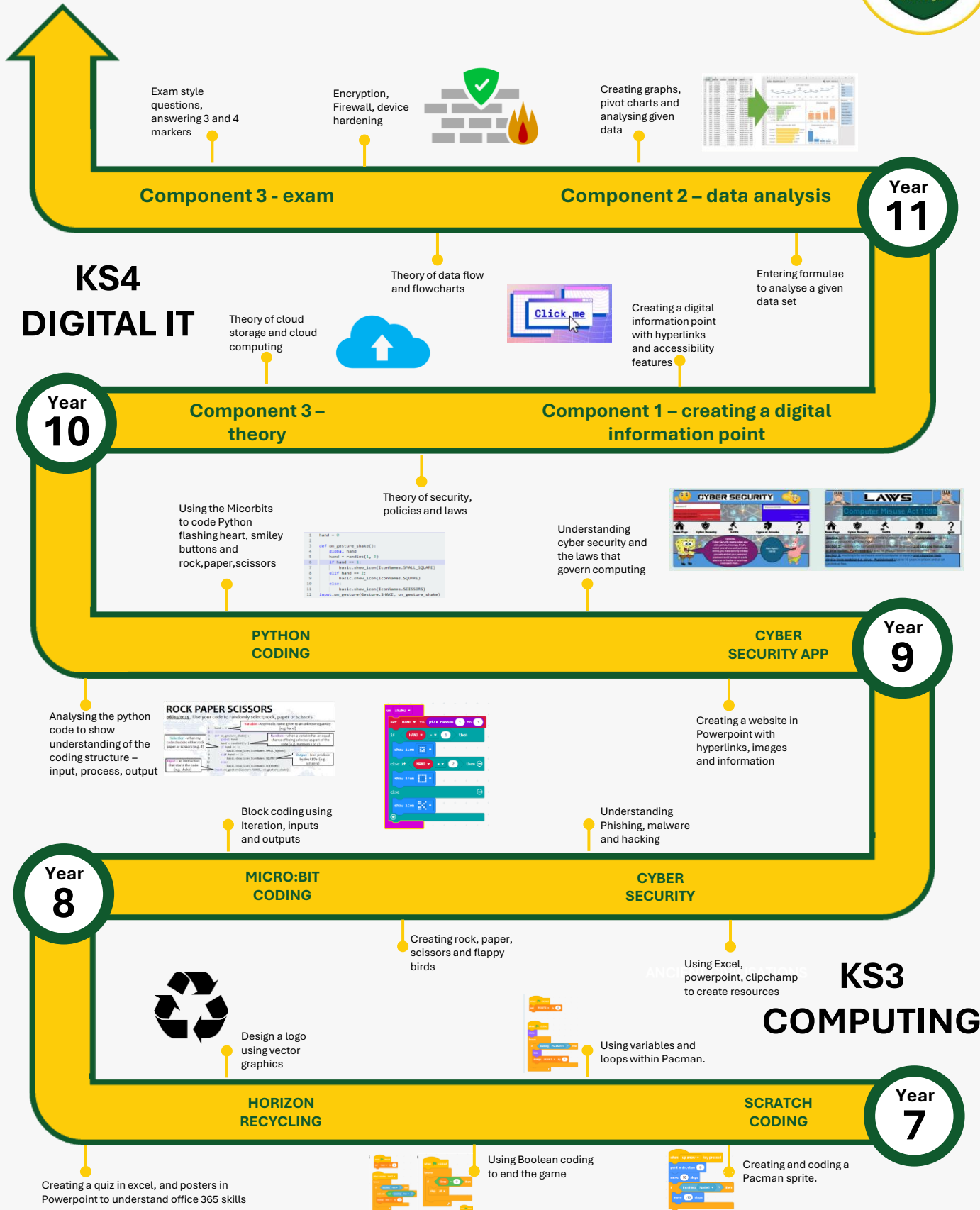


KS3 COMPUTING & KS4 DIGITAL IT CURRICULUM



INTENT: Computing enables students to become digital citizens. They develop the knowledge and skills needed to successfully use emerging technologies to participate fully in modern society.



Year 11

Component 3 - exam

Component 2 – data analysis

Exam style questions, answering 3 and 4 markers

Encryption, Firewall, device hardening



Creating graphs, pivot charts and analysing given data



KS4 DIGITAL IT

Year 10

Component 3 – theory

Component 1 – creating a digital information point

Theory of cloud storage and cloud computing



Theory of data flow and flowcharts



Creating a digital information point with hyperlinks and accessibility features

Entering formulae to analyse a given data set

Year 9

PYTHON CODING

CYBER SECURITY APP

Using the Micorbits to code Python flashing heart, smiley buttons and rock,paper,scissors

```

1 hand = 0
2 def on_gesture_shake():
3     global hand
4     hand = random(1, 3)
5     if hand == 1:
6         RockPaperScissors(SHAPE_SQUARE)
7     elif hand == 2:
8         RockPaperScissors(SHAPE_CIRCLE)
9     else:
10        RockPaperScissors(SHAPE_TRIANGLE)
11
12 input_on_gesture(Sensor.SHAKE, on_gesture_shake)
    
```

Theory of security, policies and laws

Understanding cyber security and the laws that govern computing



Analysing the python code to show understanding of the coding structure – input, process, output

```

ROCK PAPER SCISSORS
def choose():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose2():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose3():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose4():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose5():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose6():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose7():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose8():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose9():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose10():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose11():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose12():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose13():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose14():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose15():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose16():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose17():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose18():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose19():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)

def choose20():
    """Returns a random choice of rock, paper or scissors"""
    choices = ["rock", "paper", "scissors"]
    return random.choice(choices)
    
```

Block coding using Iteration, inputs and outputs



Understanding Phishing, malware and hacking

Creating a website in Powerpoint with hyperlinks, images and information

Year 8

MICRO:BIT CODING

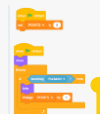
CYBER SECURITY



Design a logo using vector graphics

Creating rock, paper, scissors and flappy birds

Using Excel, powerpoint, clipchamp to create resources



Using variables and loops within Pacman.

KS3 COMPUTING

Year 7

HORIZON RECYCLING

SCRATCH CODING

Creating a quiz in excel, and posters in Powerpoint to understand office 365 skills



Using Boolean coding to end the game



Creating and coding a Pacman sprite.