



Year 6 – Spring Term 2
We Are Adventure Gamers
Computing



In this unit, children will learn a few commands of a text-based programming language (Python), to create a simple, **text based** adventure game.

Computer Science

Prior Knowledge

Children will already know how design, program and debugs games using Scratch. For this project, they will use more advance programming software.

Python syntax

```

import random
def meadow():
    print("You are standing in a meadow. \n\n")
    In the distance there is a forest and what seems to \n\n
    be a cave.")
    choice = input("Choose forest or cave: ")
    if choice == "forest":
        forest()
    elif choice == "cave":
        cave()
    else:
        print("That's not one of the choices! Try again.")
        meadow()
def forest():
    options = ["pine", "oak", "beech"]
    print("You are in a dark " + random.choice(options) +
    " forest.\n\n")
    A path is ahead, a clearing is to the right.")
    choice = input("Choose path or clearing: ")
    if choice == "path":
        path()
    elif choice == "clearing":
        clearing()
    else:
        print("That's not one of the choices!")
        forest()

```

allows the program to use Python's randomisation commands

Inserts a new line in the displayed text

the : is important – the code that follows is executed if the choice is 'forest'

what happens if none of the above conditions are met. Again the : is important.

assigns a list of the options available

continues the program command on the next line

chooses randomly from the options

defines the procedure for the meadow 'room'

Displays the following text on screen

Prompts the user for input, storing their choice in the choice variable

First part of the selection statement

These spaces are important

introduces another possible choice

These spaces are important

Computing Key Vocabulary

Binary	Binary is the language computers use. It is a series of 1s and 0s and is also used in mathematics.
Descriptors	Contains information that describes data.
Pathways	Defines the location of a file or folder in a computer's file system
Print (Not linked to printing)	Sends text, variables, or another object to the screen.
Procedure	A small section of a program that performs a specific task.
Python	A computer programming language often used to build websites and software
Repetition	Lines of code will be run multiple times.
Selection	Where a section of code will run if a certain condition or instruction is met.
Sequencing	The specific order in which instructions are performed in an algorithm.
Syntax	Specific language (characters or symbol) that a computer can read.
Variables	A variable is a piece of information in a program that we want to store but is able to change.



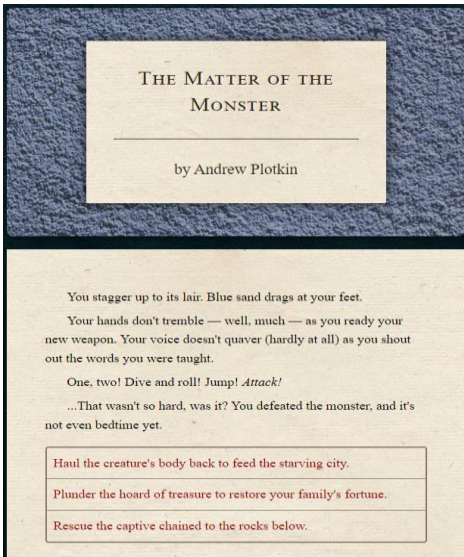
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This half term we will be using...	
Hardware	Software/Apps
WinBooks	Python

Binary letters

A	01000001	N	01001110
B	01000010	O	01001111
C	01000011	P	01010000
D	01000100	Q	01010001
E	01000101	R	01010010
F	01000110	S	01010011
G	01000111	T	01010100
H	01001000	U	01010101
I	01001001	V	01010110
J	01001010	W	01010111
K	01001011	X	01011000
L	01001100	Y	01011001
M	01001101	Z	01011010



```

mygame25.py - /Users/m.berry/Documents/mygame25.py (3.5.1)
def meadow():
    print ("You are in a beautiful, sunlit meadow. \n\
    The birds are tweeting and there are a few high clouds. \n\
    In the distance you notice a forest and what appears to \n\
    be the entrance to a cave..")
    choice = input ("Choose forest or cave: ")
    if choice == "forest" :
        forest()
    elif choice == "cave":
        cave()
    else:
        print("That's not one of the choices!")
        meadow()

def forest():
    print ("You are in a gloomy forest...\n\
    You see a clearing in one direction, everywhere else is more forest.")
    choice = input ("Choose clearing or 'go deeper': ")
    if choice == "clearing" :
        clearing()
    elif choice == "go deeper":
        godeeper()
    else:
        print("That's not one of the choices!")
        forest()

def cave():
    print ("You are in a dark and damp cave...\n\
    There's a wide passage or some narrow stairs")
    choice = input ("Choose passage or stairs: ")
    if choice == "passage" :
        passage()
    elif choice == "stairs":
        stairs()
    else:
        print("That's not one of the choices!")
        cave()

def clearing():
    print ("You are in a clearing in the forest... \n\

```

E-safety:
 To understand why there is a PEGI age rating on games and how to stay safe when gaming online.

