Above and Beyond – Computer Science (Year 8)

1

Title: Produce a podcast on a topic of your choice

Details: create a podcast on a school appropriate subject of your choice. This must be 5 minutes long and must be aimed to educate a total novice in your subject. This can be a hobby, a sport or anything else that you are passionate about.

Curriculum link: Unit 8.1 – iMedia

House Points: 50

2

Title: Create a video

Details: create a video on a school appropriate subject of your choice. This must be 3 minutes long and must be aimed to educate a total novice in your subject. This can be a hobby, a sport or anything else that you are passionate about.

Curriculum link: Unit 8.1 – iMedia

House Points: 50

3

Title: Interactive PowerPoint

Details: On an appropriate topic of your choice create an interactive PowerPoint which:
- All the slides can be accessed from the home slide. From each slide you can then return to the homepage
- Contains relevant information and images
- Has a consistent house style to the slides
- Has a wide range of effects to enhance the user experience

Curriculum link: Unit 8.1 – iMedia

House Points: 25

4

Title: Hour of Code - Minecraft

Details: Go to https://code.org/minecraft and complete the activities on this website. You will learn about Sequence, Selection and Iteration, and how to solve problems using the three constructs.

Curriculum link: Unit 8.2 – Computational Thinking and Algorithms

House Points: 50

5

Title: UK Bebras

Details: The school takes part in the UK Bebras tasks. Use this homework task to develop your skills and complete previous activities. Provide evidence that you have completed a number of the challenges. The link to the activities can be found here:

https://challenge.bebras.uk/index.php?action=user_competitions

Curriculum link: Unit 8.2 – Computational Thinking and Algorithms

House Points: 25 (50 points for evidence of a number of challenges)

6

Title: Google Doodle Bunny Programming

Details: Go to this link and complete the activities. You should print screen your solutions, and save them onto a Word Doc.
https://www.google.com/doodles/celebrating-50-years-of-kids-coding

Curriculum link: Unit 8.2 – Computational Thinking and Algorithms

House Points: 25

7

Title: Programming Constructs

Details: Make a poster for the three Programming Constructs; Sequence, Selection and Iteration. You should include definitions of each, an example of each and an image to describe each. You can do this on paper or you can use

Curriculum link: Unit 8.3 - Programming

House Points: 25

8

Title: Developing your quiz

Details: Develop your quiz Python programs. This could mean having a score system which shows the user what percentage of the questions they got right at the end, or this could mean having 50 questions that the quiz chooses 10 random questions from so the quiz is different each time.

Curriculum link: Unit 8.3 - Programming

House Points: 50