

**Scheme of Learning: Year 8 Computing****Topic Sequence:**

1	2	3	4	5	6
<b>Computer Systems</b>	<b>Representation</b>	<b>Developing for the Web</b>	<b>Intro to Python</b>	<b>Heroes of Computing</b>	<b>Mobile App</b>

**Topic Overview:**

In this unit learners research key historical people who have made a significant contribution to computing and how we interact computing devices. Lessons 1 to 3 are designed to challenge the gender/ethnic/LGBTQ divide in computing and celebrate the achievements of women, ethnic minority and LGBTQ individuals in computing. Learners will develop and present their findings on their given 'hero'. It will also give the learners an opportunity to work collaborative online and revisit the researching and presentation skills from previous units in Year 7 and 8.

Lessons 4 to 6 allow the learners to think about the future of technology and how the computing landscape might change in the near and distant future. Learners are working in groups and are tasked with producing a sales pitch and advert for a future technology. This allows learner to be creative and explore the trending patterns in computing use.

Links:

GCSE – Edexcel Topic 5 Issues and Impacts, iMedia – R094 – Visual identity and digital graphics.

**Lesson Sequence:**

**Lesson 1:** Learners review the definition of a computer are introduced to the Analytical Engine designed by Charles Babbage. The Learners are then presented with topic of heroes and are assigned groups of 2/3. Each group is then assigned a hero and are tasked to complete a 5 min presentation on that person.

**Lesson 2:** Learners review what makes a good presentation, and the parameters are set for the presentations. This is done at the start of lesson 2 to enable the learners to think about the content of their presentations and what they need to edit. All presentations must be completed before the start of next lesson.

**Lesson 3:** The Learners present their presentations and are reviewed via peer review and marked via a rubric.

**Lesson 4:** The Learners investigate the possibilities of future technology. They watch a video about future technology that is likely to be 'mainstream' in the next 20 years. Learners are then tasked with developing an advert and pitch their ideas.

**Lesson 5:** Learners continue to develop their adverts and pitches

**Lesson 6:** Learners pitch their concepts and present their adverts to the class. Pitches are peer reviewed. Presentation skills are assessed via a rubric.

**National curriculum links**

Undertake creative projects that involve selecting, using, and combining multiple applications,

Create, re-use, revise and re-purpose digital artefacts for a given audience

Understand a range of ways to use technology safely, respectfully, responsibly and securely

**Education for a connected world links**

Analyse and evaluate the reliability and validity of online information

**Sequence of Lessons:**

<b>1</b>	Lesson 1: Introduction to the topic
<b>2</b>	Lesson 2: Presentation Development
<b>3</b>	Lesson 3: Presentation of Heroes
<b>4</b>	Lesson 4: Introduction to the future
<b>5</b>	Lesson 5: Development of pitches
<b>6</b>	Lesson 6: Presentation of Future Tech pitches

**Topic Resources:**

<b>Knowledge Map:</b>	8.5: Heroes of Computing	<b>Any other Resources:</b>	
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**Assessment:**

<b>Knowledge:</b>	
<b>Application of Knowledge:</b>	Presentation of Computing Hero and Pitch for new Technology

**Supportive Reading:**

<b>The History of the Computer</b>	The History of the Computer : Ignatofsky, Rachel: Amazon.co.uk: Books
<b>Technology through time</b>	Background - Technology through time - KS3 ICT Revision - BBC Bitesize
<b>Explorer Academy Future Tech: The Science Behind the Story</b>	Explorer Academy Future Tech: The Science Behind the Story: Amazon.co.uk: National Geographic Kids, Kiffel-Alceh, Jamie: 9781426339141: Books