

ABC Links to literacy
 We develop Computer science literacy through reading Computer science literature aloud, and applying knowledge to extended writing questions. We discuss key concepts with our peers to help embed key terms.

AUTUMN - 2

Topic name: **Understanding Computer**

Why study the topic?

Defining the function of the main internal parts of basic computer architecture and the main function of an operating system.

2

SPRING - 2

Topic name: **Programming – Block Code**

Why study this topic?

CSD 1 - Animations and games. Creating authentic artefact and engage with Computer Science as a medium for creativity, communication and problem solving.

4

SUMMER - 2

Topic name: **CSD Unit 3 - Animations and Games**

Why study this topic?

Build on previous coding experience to program animations, interactive art, and games in Game Lab. The unit starts off with simple shapes and builds up to more sophisticated sprite-based games.

6

1

Subject Intent statement

"Our intent is to foster the mind of digital natives so that they can become well equipped in computing knowledge in order to play a significant role in a modern and dynamic world of technological innovations and big data. In line with our Academy intent, we ensure that all students studying Computer Science are able to access the curriculum we offer. To achieve this, we propose computing lessons which cater for differing learning needs by using a multi-sensory teaching approach."

3

SPRING – 1

Topic name: **How data is represented in computers**

Why study this topic?

Understanding that digital computers use binary to represent all data and how bit patterns represent numbers and images. Defining data types: real numbers and Boolean.

5

SUMMER - 1

Topic name: **CSD - Web Development**

Why study this topic?

Create and share the content of own web pages. After deciding what content to share with the world, learning how to structure and style web pages using HTML and CSS. Also practicing valuable programming skills such as debugging and commenting.

AUTUMN - 1

Topic name: **Computer Networks & the internet**

Why study the topic?

Understanding the purpose, advantages and disadvantages of network topologies. Data packets and routing. Evaluating the hardware needed to create a network, physical connection from home to the internet.

123 Links to Numeracy

In Computer Science, we use mathematics to organize and analyse data in tables and graphs, also to make spreadsheets to see and make sense of patterns in the data.