



OCL Computing Long Term Plan

Year 7

Overview: In year 7 students will arrive with varying levels of computing knowledge from the primary school they have attended and the technology they have access to at home. In order to build their confidence students will start to use a variety of different software and web apps to improve their digital literacy starting from logging on in lesson 1.

Autumn 1 will give students opportunity to familiarize themselves with the computing lab and/or iPad. Many students will soon be creating social media accounts if they have not already. Student will be looking at what respectful online communication looks like and how messages online can be seen without context. Students will then look at cyberbullying and create a presentation on the subject using MS PowerPoint. This allows students to cover important e-safety topics while still getting hands on experience with their computer and commonly used software. In Autumn 2 students will use another common software package MS Excel to work with data. The purpose of this unit is for students to understand how data can be collected, analyzed, and used. Spring 1 introduces students to networks and how they aid communication between computers. This unit will first look at the benefits of computer networks, how they are created and how they operate. The second half of the unit will focus on the Internet, smart devices and how this is changing the way we live our lives. Spring 2 will be the first experience of computer programming for many students. They will be using Scratch a web based visual programming language that allows students to create programs by connecting premade code blocks. Student will be able to explore the programming concepts of sequence, selection and iteration without worrying about syntax errors. This unit will set the foundation of students programming knowledge embedding key concepts that they will continue to explore throughout KS3 and KS4. Summer 1 will focus on creating text and image media while also looking at legal issues such as copyright law and plagiarism. This unit will also look at credibility, sourcing information and fake news. Finally in summer 2 students will look at how computers work. Students will first study hardware and the role of different components. Then they will look at software in general terms, instead of focusing on specific packages they will understand the role of different archetypes of software and operating systems.

Software Packages: Students will use a combination of a web browser, Formative.com, MS Teams and MS OneNote throughout each unit. In addition throughout year 7 they will use MS Office(PowerPoint, Excel and Word), Scratch.mit.edu, and Photopea.com.

7	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	7.1 Using Technology Safely	7.2 Data Modelling (Spreadsheets)	7.3 Computer Networks	7.4 Scratch Programming 1	7.5 Multimedia 1	7.6 Computer Systems
SOI Core Concept Links	1, 2, 4, 5, 11	1, 2, 11	8, 10, 11	1, 3, 6, 9, 11	1, 2, 4, 5, 10, 11	1, 2, 7, 11
What will be covered?	<ol style="list-style-type: none"> 1. Passwords and security 2. Online grooming 3. Respectful Communication Online 4. What is cyberbullying? 5. Presenting to an Audience 1 6. Presenting to an Audience 2 	<ol style="list-style-type: none"> 1. What is a spreadsheet? 2. Quick Calculations 3. Collecting Data 4. Working with Data 5. Working with Data 2 6. Bringing it all together 	<ol style="list-style-type: none"> 1. Introduction to Networks 2. Network Hardware 3. Wired and Wireless Networks 4. The Internet 5. The internet of Things 6. The World Wide Web <p>Safer Internet Day (Optional)</p>	<ol style="list-style-type: none"> 1. Sequence and Variables 2. Selection 3. Operators 4. Iteration 5. Problem Solving 6. Bringing it all together 	<ol style="list-style-type: none"> 1. Word Processing 2. Licencing and copyright 3. Credibility 4. Email and online images 5. Putting content online 6. Assessment 	<ol style="list-style-type: none"> 1. Peripherals 2. Internal Hardware 3. Storage 4. Application software 5. System software 6. Bringing it all together

Year 8

Overview: In year 8 students will have completed computing as part of Technology rotation in Year 7 so will have limited computing knowledge. To build their confidence students will study the same topics as in Year 7 this will help set the foundations required for Computing going forward. Students will use a variety of different software and web apps to improve their digital literacy.

Autumn 1 will give students opportunity to familiarize themselves with the computing lab and/or iPad. Many students will soon be creating social media accounts if they have not already. Student will be looking at what respectful online communication looks like and how messages online can be seen without context. Students will then look at cyberbullying and create a presentation on the subject using MS PowerPoint. This allows students to cover important e-safety topics while still getting hands on experience with their computer and commonly used software. In Autumn 2 students will use another common software package MS Excel to work with data. The purpose of this unit is for students to understand how data can be collected, analyzed, and used. Spring 1 introduces students to networks and how they aid communication between computers. This unit will first look at the benefits of computer networks, how they are created and how they operate. The second half of the unit will focus on the Internet, smart devices and how this is changing the way we live our lives. Spring 2 will be the first experience of computer programming for many students. They will be using Scratch a web based visual programming language that allows students to create programs by connecting premade code blocks. Student will be able to explore the programming concepts of sequence, selection and iteration without worrying about syntax errors. This unit will set the foundation of students programming knowledge embedding key concepts that they will continue to explore throughout KS3 and KS4. Summer 1 will focus on creating text and image media while also looking at legal issues such as copyright law and plagiarism. This unit will also look at credibility, sourcing information and fake news. Finally in summer 2 students will look at how computers work. Students will first study hardware and the role of different components. Then they will look at software in general terms, instead of focusing on specific packages they will understand the role of different archetypes of software and operating systems.

Software Packages: Students will use a combination of a web browser, Formative.com, MS Teams and MS OneNote throughout each unit. In addition throughout year 7 they will use MS Office(PowerPoint, Excel and Word), Scratch.mit.edu, and Photopea.com.

8	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	7.1 Using Technology Safely	7.2 Data Modelling (Spreadsheets)	7.3 Computer Networks	7.4 Scratch Programming 1	7.5 Multimedia 1	7.6 Computer Systems
SOI Core Concept Links	1, 2, 4, 5, 11	1, 2, 11	8, 10, 11	1, 3, 6, 9, 11	1, 2, 4, 5, 10, 11	1, 2, 7, 11
What will be covered?	<ol style="list-style-type: none"> 1. Passwords and security 2. Online grooming 3. Respectful Communication Online 4. What is cyberbullying? 5. Presenting to an Audience 6. Presenting to an Audience 	<ol style="list-style-type: none"> 1. What is a spreadsheet? 2. Quick Calculations 3. Collecting Data 4. Working with Data 5. Working with Data 2 6. Bringing it all together 	<ol style="list-style-type: none"> 1. Introduction to Networks 2. Network Hardware 3. Wired and Wireless Networks 4. The Internet 5. The internet of Things 6. The World Wide Web <p>Safer Internet Day (Optional)</p>	<ol style="list-style-type: none"> 1. Sequence and Variables 2. Selection 3. Operators 4. Iteration 5. Problem Solving 6. Bringing it all together 	<ol style="list-style-type: none"> 1. Word Processing 2. Licencing and copyright 3. Credibility 4. Email and online images 5. Putting content online 6. Assessment 	<ol style="list-style-type: none"> 1. Peripherals 2. Internal Hardware 3. Storage 4. Application software 5. System software 6. Bringing it all together

Year 9

Overview: In year 9 students have completed Computing as part of the technology rotation, with Y7 completed during the pandemic while working as year group bubbles. Due to this, students in this year group have varying levels of knowledge. In order to build on this students will complete the same topics as Year 7 and 8 to help them build a better understanding of Computing. They will study developing for the web topic instead of scratch as this was covered in Y8. Students will develop their confidence by using a variety of different software and web apps to improve their digital literacy.

Autumn 1 will give students opportunity to familiarize themselves with the computing lab and/or iPad. Many students will soon be creating social media accounts if they have not already. Student will be looking at what respectful online communication looks like and how messages online can be seen without context. Students will then look at cyberbullying and create a presentation on the subject using MS PowerPoint. This allows students to cover important e-safety topics while still getting hands on experience with their computer and commonly used software. In Autumn 2 students will use another common software package MS Excel to work with data. The purpose of this unit is for students to understand how data can be collected, analyzed, and used. Spring 1 introduces students to networks and how they aid communication between computers. This unit will first look at the benefits of computer networks, how they are created and how they operate. The second half of the unit will focus on the Internet, smart devices and how this is changing the way we live our lives.

Spring 2 students will have the opportunity to look at how websites are created and create their own website. While creating web pages students will also focus on good web design practices and the importance of making websites accessible to everybody. Summer 1 will focus on creating text and image media while also looking at legal issues such as copyright law and plagiarism. This unit will also look at credibility, sourcing information and fake news. Finally in summer 2 students will look at how computers work. Students will first study hardware and the role of different components. Then they will look at software in general terms, instead of focusing on specific packages they will understand the role of different archetypes of software and operating systems.

Software Packages: Students will use a combination of a web browser, Formative.com, MS Teams and MS OneNote throughout each unit. In addition throughout year 7 they will use MS Office (PowerPoint, Excel and Word), Scratch.mit.edu, and Photopea.com.

9	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	7.1 Using Technology Safely	7.2 Data Modelling (Spreadsheets)	7.3 Computer Networks	8.6 Developing for the Web	7.5 Multimedia 1	7.6 Computer Systems
SOI Core Concept Links	1, 2, 4, 5, 11	1, 2, 11	8, 10, 11	1, 4, 5, 8, 10, 11	1, 2, 4, 5, 10, 11	1, 2, 7, 11
What will be covered?	<ol style="list-style-type: none"> 1. Passwords and logging on 2. Getting started with Horizons 3. Respectful Communication Online 4. What is cyberbullying? 5. Presenting to an Audience 6. Presenting to an Audience 	<ol style="list-style-type: none"> 1. What is a spreadsheet? 2. Quick Calculations 3. Collecting Data 4. Working with Data 5. Working with Data 2 6. Bringing it all together 	<ol style="list-style-type: none"> 1. Introduction to Networks 2. Network Hardware 3. Wired and Wireless Networks 4. The Internet 5. The internet of Things 6. The World Wide Web <p>Safer Internet Day (Optional)</p>	<ol style="list-style-type: none"> 1. Creating a webpage with HTML 2. Styling a webpage with CSS 3. Adding images and other content 4. Making website accessible 5. Navigating to other pages <p>Creating a personal website</p>	<ol style="list-style-type: none"> 1. Word Processing 2. Licencing and copyright 3. Credibility 4. Email and online images 5. Putting content online 6. Assessment 	<ol style="list-style-type: none"> 1. Peripherals 2. Internal Hardware 3. Storage 4. Application software 5. System software 6. Bringing it all together