ICT Department

Year: 7 Term 1a

Topic: Unit 1- Getting started with Office 365

Learning Journey

Prior learning:
Students will be joining WSFG from a range of feeder primary schools. Prior skills, knowledge and understanding will differ in relation to resources available at these schools. Many students would have used applications in Ofice365 at school and during lockdown learning and therefore will be familiar with the software applications. There is a possibility that students would have used alternative applications such Google Classroom or ShowMyHomework and it is therefore a requirement to introduce the concepts of Cloud computing and Office365 skills.

	Learning sequence –						***Endpoint***
Main learning steps	ICT classroom rules and expectations shared. Students given Office365 logins. Students log in to school network Students login to Office365 and navigate apps.	Students are introduced to the Office365 dashboard and main apps Students will be introduced to Outlook and the key features of this emailing application.	Students are introduced to the concepts of 'Cloud Computing' Students are shown OneDrive app and key features Students are shown how to add new files and folders	Students are introduced to MS Teams and key features of this application Students are shown how to access Class Notebook from Teams Students are shown the Assignments feature on Teams and how to upload/ submit work.	Whole class feedback- Bronze assessment Students are shown how to access and use Microsoft Word and PowerPoint from Office365 dashboard Students are introduced to key features of Word and PowerPoint and how these files can be saved to OneDrive	Whole class feedback- Silver assessment	Students understand the concepts of Cloud computing and networking. Students understand the importance of keeping passwords and data files secure. Students can log in to the school network and Office365 and use the following Microsoft applications: • Teams • OneNote/Class Notebook • Outlook • OneDrive • Word • PowerPoint
Assessment	Baseline test			Bronze test- Multiple choice	Silver test- Multiple choice	Gold assessment- End of unit project to assess skills of Class Notebook and Teams	

Where will we use these ideas again:
Students will use Office365 skills throughout KS3 Computing and across other subjects. All classwork/ homework will be assigned on Teams and completed on Class Notebook. All files will be saved on OneDrive and any student-teacher communication will take place through Teams or Outlook.

ICT Department

Year: 7 Term 1b

Topic: Unit 2-Computational Thinking

Learning Journey

Prior learning:
Student understanding of computational thinking will vary depending on what feeder schools they attended. Majority will have some understanding of algorithms and would have applied this understanding in mostly block coding environments such as Scratch. The other cornerstones of computational thinking are less likely to have been investigated and many students will be introduced to these concepts for the first time.

	Learning sequence –						***Endpoint***
Main learning steps	Students will be introduced to the four cornerstones of computational thinking and the key terms: Algorithm, Abstraction, Decomposition, Pattern recognition	Whole class feedback- Bronze assessment Students will learn how to solve a problem by thinking like a computer scientist. Data provided to students will need to be decomposed, abstracted and patterns in the data will need to be recognised before a solution (algorithm) is produced.	Students will apply their understanding of computational thinking to solve further mystery problems. Why did Mark Zuckerberg make Facebook? What was the problem? How was it solved?	Whole class feedback- Silver assessment Students will learn how to present an algorithm in standard English, Pseudocode and in a Flowchart diagram	Students will be given a problem. In pairs, they will need to devise a solution using the concepts of computational thinking: decomposition, abstraction and Pattern recognition. Students will present their work to the class using suitable presentation software		Students understand the terms Algorithm, decompositions, Abstraction and Pattern recognition. Students are able to plan a program using flowcharts and pseudo-code. Students are able to understand what an efficient algorithm is. Students are able to produce an algorithm to solve a problem.
Assessment	Bronze test: Multiple-choice		Silver test: Multiple choice		Gold assessment.		

Where will we use these ideas again: Students will revisit the concepts of computational thinking during programming units throughout their KS3 computing journey. Students will be able to apply their knowledge of solving a problem and implementing an algorithm when programming in Scratch and Python

ICT Department

Year: 7 Term 2a
Topic: Unit 3- Collaborating Online Safely
Learning Journey

Prior learning: *Students will have learnt about e-safety at primary school during Computing and PSHE lessons as part of the National Curriculum requirements. Again, the knowledge and understanding of collaborating online respectfully and safety will differ depending on the materials delivered by each feeder school. This topic is however important to revisit, particularly as new applications and social network platforms are frequently introduced to young people.*

Students will have been introduced to Office 365 and the ability to communicate online through Teams and Outlook. This unit will highlight to students the need to communicate respectfully and professionally using the schools forums.

Learning sequence –							***Endpoint***
Main learning steps	Students will learn how to be respectful when communicating online. Students will also learn about their digital footprint.	Students will learn about cyberbullying and what to do if they or a friend are affected by cyberbullying.	Students will have a look at and decide which scenarios constitute inappropriate content or contact. Students will also find out how to report any concerns that they have about what they experience online.	Whole class feedback- Bronze assessment Student will learn how to keep their accounts secure by using a sensible password. Students also learn how to keep their online data secure when communicating and playing games online.	Students will learn how to find copyright free images to use in their own digital products. Students will also understand the importance of identifying the source of information in their digital products.	Whole class feedback- Silver assessment Students will learn how to create a professional PowerPoint presentation using consistent design tools. Students will create a presentation for a year 6 audience.	Students will understand the importance of keeping their school and personal account secure. Students will understand how to communicate online respectfully Students will learn to use copyright free images and how to source the owner of information taken from the internet. Students will know to recognise and report any concerns when communicating online.
Assessment			Bronze test- Multiple choice		Silver test- Multiple choice	Gold assessment	

Where will we use these ideas again: *Students will use this knowledge in the Cyber-security unit in year 8. General e-safety understanding will be consistently revised during computing lessons. Students will also use PowerPoint presentation skills in other units when presenting their work.*

ICT Department

Year: 7 Term 2b

Topic: Unit 4- Introduction to Programming

Learning Journey

Prior learning: Students will have learnt the terms algorithms, decomposition, abstraction, pattern identification, sequence, selection and iteration in unit 2-computational thinking. Students will also have used the Scratch program in unit 2 and used the repeat block.

	Learning sequence –						***Endpoint***
Main learning steps	Students will revise the terms algorithms, decomposition, abstraction, pattern identification Students will be introduced to the Logo programming language and the Logo online programming application Students will write basic instructions in Logo to draw simple shapes (square, triangle, rectangle, pentagon)	Students will learn about the Pen Up and Pen Down function in Logo to draw more than one shape next to each other Students will learn how to make their Logo program more efficient by using the Repeat function	Students will understand what a **procedure** is in programming Students will create a program in Logo using procedures. Students will identify the benefits of using procedures in their code.	Whole class feedback- Bronze assessment Students will recap on how to use Scratch from the previous unit. Students will recap on the programming techniques: Sequence, selection and iteration Students will create programs in Scratch to draw simple shapes (square, triangle, rectangle, pentagon) Students will learn to make their Scratch codes more efficient by using the Repeat blocks	Students will learn how to create a procedure in Scratch Students will create a dance routine in Scratch using the repeat function and procedures.	Whole class feedback- Silver assessment Students will understand syntax errors Students will be able to identify errors in a given code and understand how to correct the error.	Students can create a program that solves a problem using a basic text- based language (Logo) and block-based programming language (Scratch) Students can use sequencing, selection and iteration to create a program. Students can look for and correct syntax errors in a program
Assessment			Bronze test: Multiple-choice		Silver test: Multiple-choice	Gold assessment- Create a presentation to show understanding of Logo, Scratch and key programming techniques	

Where will we use these ideas again:
Students will continue to learn the concepts of programming in Python units 8 and 15. Programming will also be revisited when teaching the concepts of Boolean logic, searching and sorting in unit 17 and computer models in unit 11.