

| Unit Overview: Scratch Programming | | | | | | | | |
|--|-------|-------|--|-------|-------|---|----------------|---|
| Half- Term: | AUT 1 | AUT 2 | SPR 1 | SPR 2 | SUM 1 | SUM 2 | No of Lessons: | 5 |
| Key Focus for Unit: <i>What is the key knowledge being delivered?</i> <i>What is the intent of this unit?</i> | | | | | | | | |
| <p>The key knowledge is programming techniques. The intent of this unit is to introduce the year 7's to the idea of coding, for this knowledge to be built on across IT & Computer Science. They will learn about algorithms, variables, and if statements. These ideas are introduced in Scratch, a simpler platform so students can understand the content and get practice applying programming skills. This will prepare students for applying these programming skills in the text-based coding language of Python later on.</p> | | | | | | | | |
| Key Knowledge and Big Ideas: <i>What Powerful Knowledge and Big Ideas are explored in this Unit?</i> <i>How have these progressed from previous learning? What gaps in knowledge have you identified from baselining and how are the being closed?</i> | | | | | | | | |
| <p>Students will explore the big idea of coding. This is when students will be first introduced to variables, algorithms and other computation thinking and coding skills, which they will continue to come back to over their time in KS3 and KS4. Students will need to break down a problem, and then code a solution. In year 7, we do this in scratch, which many students are familiar with in primary school. The unit will start with the fundamentals for students who haven't encountered scratch before. There will be a focus on learning key skills and terminology that will be applicable to the students as they progress through IT & Computer Science.</p> | | | | | | | | |
| Unit Assessment: <i>How will this unit be assessed?</i> <i>What is the frequency of assessments – baselines etc?</i> | | | | | | | | |
| <p>Students will complete weekly retrieval starters, and weekly homework quizzes to assess their understanding of content learnt, and to aid in getting this content into student's long-term memory. Students will be continuing with coding after the half term, so at the end of Spring 1, will be completing a mid-unit test. They will get feedback on this test, where they work on the highest leverage action to improve.</p> | | | | | | | | |
| Key Skills Explored | | | Vocabulary Selected for DVI | | | Links to Previous Unit | | |
| Problem decomposition Using Scratch Computational thinking Understanding algorithms Using a block-based programming language to code | | | Algorithm Iteration Subroutine Selection Duplicate | | | Under the hood unit – students will need to think on input/output and see them in a new context Primary school – students will need to think back on Scratch | | |
| Links to Careers/Employability | | | How does this unit prepare students for the next unit? | | | | | |
| Software Developer QA tester Games design Games development | | | Prepares students for Coding unit on Python which is their next unit. Python is done again in year 9, and students taking GCSE Computer Science will also revisit Python. This also prepares them for their Mobile App Development unit which they will complete in Year 8, where they will use a different block-based coding language. | | | | | |