Northolt High School
Scheme of Learning

Year group: 13	Term: Summer 1	Unit duration: 6 weeks	Number of lessons: 9	Unit title: Programming Techniques

Assessment outcome: How computers can be used to solve problems, and how programs can be written in either procedure/imperative language or object oriented language depending on the problem.	**Fertile question?** What is the main difference between procedure/imperative language and object oriented Programming?

Key skills/concepts/knowledge that students should cover	**Start RAG**	**End RAG**	**Literacy. Key vocabulary/subject terminology that students should cover**
a) Programming constructs: sequence, iteration, branching. (b) Recursion, how it can be used and compared to an iterative approach. (c) Global and local variables. (d) Modularity, functions and procedures, parameters passing by value and by reference. (e) Use of an IDE to develop/debug a program. f) Use of object oriented techniques.			Techniques Constructs Sequence Recursion Iterative Global Local Modularity Functions Procedures Parameter Debug Oriented Approach us
Stretch. Key skills/concepts/knowledge that students should cover **Creating Pseudocodes in imperative programming and using Object oriented programs for more complex solutions.**			**Suggested materials teachers could/should use** TeachICT, Isacc Computing, A Level Computing textbook Computer Science Powerpoints/Worksheets **Key home learning tasks students should complete** Worksheets