<table>
<tr><td>Year group: 12</td><td>Term: 2</td><td>Unit duration: 6</td><td>Number of lessons: 15</td><td colspan="3">Unit title: Programming Languages</td></tr>
<tr><td colspan="4">Assessment outcome: To understand the different types of programming languages and their benefits and drawbacks.</td><td colspan="3">Fertile question? How are the commands we write in high level languages such as Python understood by the computer?</td></tr>
<tr><td colspan="4">Key skills/concepts/knowledge that students should cover</td><td>Start RAG</td><td>End RAG</td><td>Literacy. Key vocabulary/subject terminology that students should cover</td></tr>
<tr><td colspan="4">Low level and high level languages

Machine code, Assembly language and Binary/byte code

Advantages and disadvantages of using high level languages to write programs

What are the different types of translation methods and what are their performance implications?</td><td></td><td></td><td>High/low level
Machine/assembly language
Translator
Compiler
Interpreter
Virtual Machine
Cross-assemblers</td></tr>
<tr><td colspan="5">Stretch. Key skills/concepts/knowledge that students should cover

Write a program in a low level language such as assembly.</td><td></td><td>Suggested materials teachers could/should use

TeachICT
Computer Science Powerpoints/Worksheets</td></tr>
<tr><td colspan="5"></td><td></td><td>Key home learning tasks students should complete
Interpret commands written in low level assembly languages and explain what they do on a hardware level.</td></tr>
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