

**Question: Can you plan and make a quiz?**  
 Programming B- Selection in quizzes.

**National Curriculum Link:**

- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

**International Baccalaureate Learner Profile Link:**

**Communicators.**

How do we express and present ourselves to others?  
 How can we communicate with others?  
 We can be clear in both written and oral form?

**Principled.**

To take my time and think before acting.  
 To remain calm, thoughtful and deliberate in my actions.

**Prior Skills: Year 4**

- To list an everyday task as a set of instructions including repetition.
- To use an indefinite loop to produce a given outcome.
- To use a count-controlled loop to produce a given outcome.
- To plan a program that includes appropriate loops to produce a given outcome.
- To recognise tools that enable more than one process to be run at the

**New Skills: Year 5**

- To experiment with a repeat-until loop.
- To use a condition in an 'if... then...' statement to produce a given outcome.
- To show that a condition can switch program flow in one of two ways.
- To use a condition in an 'if... then... else...' statement to produce given outcomes.

**Future Skills: Year 6**

- To identify a variable in an existing program.
- To experiment with the value of an existing variable.
- To choose a name that identifies the role of a variable to make it more usable (to humans).
- To decide where in a program to set a variable.
- To update a variable with a user input.

<p>same time (concurrency). To create two or more sequences that run at the same time.</p>		<p>To use an event in a program to update a variable. To use a variable in a conditional statement to control the flow of a program. To use the same variable in more than one location in a program.</p>
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**Knowledge, Skills and Understanding**

Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.  
To test the program and recognising when it needs to be debugged.  
To attempt to debug their own programs and corrects/ debugs errors in code.  
To recognise an error in an existing program and attempt to debug/ fix the program.

<p><b>Resources:</b> Hardware: iPads, Computers. Scratch.  Teach computing resources.</p>	<p><b>Websites or Apps:</b> Apps: Book creator. <a href="https://www.stem.org.uk/resources/elibrary/resource/35832/scratch-beginners">https://www.stem.org.uk/resources/elibrary/resource/35832/scratch-beginners</a> <a href="http://code-it.co.uk/scratch/scratchplan">http://code-it.co.uk/scratch/scratchplan</a></p> <p><b>Extended Writing Opportunities:</b> Create a quiz for another group.</p>
<p><b>Vocabulary:</b> Algorithms, programs, repetition, knowledge, Scratch, debug, program.</p>	<p><b>Numeracy skills:</b> Directional language.</p>
<p><b>Suggested Quality Texts:</b> See selection in library.</p>	<p><b>WOW Experience:</b> NCCE link.</p>
<p><b>Cross Curricular Links:</b> Science: quizzes about animals.</p>	