

SOLO taxonomy: Binary numbers (5-6)

We are representing 'text' in binary numbers				
SOLO LEVEL	One	Many	Relate	Extend
SOLO VERB	<i>Identify isolated skills</i>	<i>Describe and combine serial skills</i>	<i>Integrate skills</i>	<i>Evaluate skills</i>
<p>DECLARATIVE KNOWLEDGE Knowing about (talking or writing about) binary numbers</p> <p>Representing 'text' in binary numbers</p> <p>Success criteria</p>	<p>I can IDENTIFY</p> <p>... the use of 0 and 1 in binary digits</p> <p>For example:</p> <ul style="list-style-type: none"> <input type="checkbox"/> binary digits up to 8 bits <input type="checkbox"/> using binary cards to make a binary digit to show ON/OFF state 	<p>I can DESCRIBE</p> <p>... the use of representing binary numbers and counting in binary when converting binary digits to decimal numbers</p> <p>... the use of binary digits and a table of characters when encoding messages.</p> <p>For example:</p> <ul style="list-style-type: none"> <input type="checkbox"/> using a table with headings 1, 2, 4, 8, 16, etc to write binary numbers and their decimal equivalent <input type="checkbox"/> writing dates and other everyday numbered information in binary <input type="checkbox"/> referring to a binary character table to encode a message 	<p>... AND I can EXPLAIN how binary digits are used to represent text and how to convert between binary digits and decimal numbers</p> <p>I can ANALYSE information for relevance and give reasons for inclusion in an infographic to explain how binary is used by computers</p>	<p>AND I can EVALUATE the effectiveness of my infographic based on:</p> <ul style="list-style-type: none"> <input type="checkbox"/> meeting its intended purpose

SOLO taxonomy: Binary numbers (5-6)

<p>FUNCTIONING KNOWLEDGE Knowing how to ...</p> <p>Representing 'text' in binary numbers</p> <p>Success criteria</p>	<p>I can write a binary digit up to 8 bits</p>	<p>I can independently convert binary digits to decimal numbers</p> <p>BUT I sometimes need support to convert the larger binary digits to the correct decimal number</p> <p>I can encode a word such as my name using a binary character table</p> <p>I can use a spreadsheet made by someone else to convert a binary number to a decimal number</p>	<p>I can independently and confidently convert binary digits to decimal numbers</p> <p>I can independently encode messages using binary following a binary character table</p> <p>I can create my own spreadsheet to convert a binary number based on a sample file</p> <p>I can create an infographic that explains how computers use binary</p>	<p>I can independently create an infographic</p> <p>AND I can seek and act on feedback to improve the infographic</p>
<p>Digital technologies</p> <p>Way of thinking</p>		<p>Computational thinking</p>	<p>Computational thinking</p>	<p>Computational thinking</p> <p>Design thinking</p>

As learning progresses, it becomes more complex. SOLO stands for the Structure of the Observed Learning Outcome. It is a means of classifying learning outcomes in terms of their complexity. It can help differentiate a task to enable students to operate at their level and provide learning tasks that are progressively more challenging.

For more about SOLO Taxonomy refer to these websites

[John Biggs Solo Taxonomy](#)

[HookED: Solo Taxonomy](#)

