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| --- |
| **We are representing ‘text’ in binary numbers** |
| **SOLO LEVEL** | **One** | **Many** | **Relate** | **Extend** |
| **SOLO VERB** | ***Identify isolated skills*** | ***Describe and combine serial skills*** | ***Integrate skills*** | ***Evaluate skills*** |
| **DECLARATIVE KNOWLEDGE** Knowing about (talking or writing about) binary numbers Representing ‘text’ in binary numbersSuccess criteria  | I can **IDENTIFY****…** the use of 0 and 1 in binary digitsFor example:* binary digits up to 8 bits
* using binary cards to make a binary digit to show ON/OFF state
 | I can **DESCRIBE**… the use of representing binary numbers and counting in binary when converting binary digits to decimal numbers… the use of binary digits and a table of characters when encoding messages. For example:* using a table with headings 1, 2, 4, 8, 16, etc to write binary numbers and their decimal equivalent
* writing dates and other everyday numbered information in binary
* referring to a binary character table to encode a message
 | … AND I can **EXPLAIN** how binary digits are used to represent text and how to convert between binary digits and decimal numbersI can **ANALYSE** information for relevance and give reasons for inclusion in an infographic to explain how binary is used by computers Page 1 of 2 | AND I can **EVALUATE** the effectiveness of my infographic based on:* meeting its intended purpose
 |
| **FUNCTIONING KNOWLEDGE** Knowing how to … Representing ‘text’ in binary numbersSuccess criteria  | I can write a binary digit up to 8 bits | I can independently convert binary digits to decimal numbersBUT I sometimes need support to convert the larger binary digits to the correct decimal numberI can encode a word such as my name using a binary character table I can use a spreadsheet made by someone else to convert a binary number to a decimal number | I can independently and confidently convert binary digits to decimal numbersI can independently encode messages using binary following a binary character table I can create my own spreadsheet to convert a binary number based on a sample fileI can create an infographic that explains how computers use binary | I can independently create an infographic AND I can seek and act on feedback to improve the infographic |
| **Digital technologies****Way of thinking** |  | **Computational thinking** | **Computational thinking** | **Computational thinking****Design thinking** |

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**](http://www.johnbiggs.com.au/academic/solo-taxonomy/)

[**HookED: Solo Taxonomy**](http://pamhook.com/solo-taxonomy/)

Page 2 of 2

Page 2 of 2