|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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 numbers  Success criteria | I can **IDENTIFY**  **…** the use of 0 and 1 in binary digits  For 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 numbers  I 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 numbers  Success criteria | I can write a binary digit up to 8 bits | I can independently convert binary digits to decimal numbers  BUT I sometimes need support to convert the larger binary digits to the correct decimal number  I 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 numbers  I 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 file  I 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