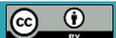


# SOLO taxonomy: Representing images using binary (5-6)

We are using an online tool that uses binary numbers to create pixels of different colours. We then design our own image.

SOLO LEVEL	One	Many	Relate	Extend
<b>SOLO VERB</b>	<i>Identify isolated skills</i>	<i>Describe and combine serial skills</i>	<i>Integrate skills</i>	<i>Evaluate skills</i>
<b>DECLARATIVE KNOWLEDGE</b> Knowing about (talking or writing about representing 1 and 0s as colours)  Creating a digital image made up of pixels  Success criteria	I can <b>IDENTIFY</b> ...  the use of 0 or 1 in representing the colours black and white  For example:  <input type="checkbox"/> in an image made up of black and white pixels	I can <b>DESCRIBE</b>  ... how to make an image made up of black and white pixels  ... how a combination of binary digits is used to represent RGB colours	... AND I can <b>EXPLAIN</b> my binary digit choices – when creating an image for a particular purpose such as an avatar for a game or sprite for an animation	AND I can <b>EVALUATE</b> how effectively my image, which is made up of different coloured pixels, meets its functional requirements and intended purpose  I can <b>GENERALISE</b> about the effect on file size, comparing my image with one that has more pixels and a bigger range of colours
<b>FUNCTIONING KNOWLEDGE</b> Knowing how to ...  Creating a digital image made up of pixels  Success criteria	I can identify numbers on a grid as ones and zeros which represent black (0) or white (1)	I can encode a grid made up of black and white pixels and vary the width and height  I can encode a grid using a red, green or blue colours that combine RGB; for example, (1,0,0) to make red or (0,0,1) to make green	I can independently and confidently shade a grid with up to 8 colours by combining binary digits in RGB  AND I can debug as I build an image to ensure the correct intended colours are represented	AND I can seek out and act on feedback to improve the effectiveness of my programming choices as I go
<b>Digital technologies</b>  <b>Ways of thinking</b>	<b>Computational thinking</b>	<b>Computational thinking</b>	<b>Computational thinking</b>	<b>Computational thinking</b>  <b>Design thinking</b>



# SOLO taxonomy: Representing images using binary (5-6)

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](#)



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