|  |  |  |  |
| --- | --- | --- | --- |
| **Student Name:** |  |  **Date:** |  **/ /** |

This assessment checklist provides a guide to record student's demonstrated skills and knowledge.

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**Pixels and binary digits: Assessment checklist**

|  |  |  |
| --- | --- | --- |
| **Demonstrated knowledge/skills** | **Yes/No or progressing** | **Comments** |
| The student **explains** the way an image is encoded using binary data. * 1 bit per pixel produces either a black pixel or a white pixel
1. 1

* 3 bits per pixel produces 8 colours;

111 110 101 001 000 100 011 010 The bitmap image provided is used to **explain** how binary digits are combined to create a coloured pixel. * The student explains that an image is made up of individual pixels.
* The student connects the 3 bit binary digits with the colours represented in the bitmap image
* The student can represent the 5 colours correctly
* The student identifies the 3 remaining combinations of binary digits
 |  |  |
| The student can create their own bitmap image by encoding a grid using binary bit representation. * The grid is encoded using binary digits for each grid square
* The encoded grid produces an image
* The student can decode someone else’s grid to produce an accurate image
 |  |  |