## Pixels and binary digits: Assessment checklist



Student Name:	Date: / /	

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

Demonstrated knowledge/skills	Yes/No or progressing	Comments
The student <b>explains</b> the way an image is encoded using binary data.		
- 1 bit per pixel produces either a black pixel or a white pixel		
0 1		
- 3 bits per pixel produces 8 colours;		
111 110 101 001 000 100 011 010		
The bitmap image provided is used to <b>explain</b> 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		
<ul> <li>The student identifies the 3 remaining combinations of binary digits</li> </ul>		
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		
<ul> <li>The encoded grid produces an image</li> <li>The student can decode someone else's grid to produce an accurate image</li> </ul>		