Representing graphics

All images on a monitor are made up off pixels.

Each pixel can be given a colour.

The colours available depend on the number of bits per pixel (bpp).

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| Number of Bits | Number of colours possible |
| 1 | 2 e.g. Black and White |
| 2 | 4 colours (2₂) |
| 3 | 8 colours (23) |
| 8 | 256 colours (28) |
| 16 | 65,536 colours (216) |

The bigger the colour depth the bigger the file size.

16 bpp is often called high colour

24 bpp is called true colour

32 bpp is called deep colour

In addition to the colour depth and the dimensions the computer also needs to know the resolution of the image. This is usually given as pixels per unit (e.g. pixels per inch often referred to as dots per inch or dhi).

All of this information is stored in an images Meta data.

Meta data is data about data. It stores information like resolution