

Image Compression

Computers store images as numbers that take up lots of memory to store. To save space computers use patterns in the data to store a picture using fewer numbers.



Run-length encoding Pixel Puzzle

SOLUTION

The numbers below represent a picture of a Christmas creature. Each pair gives a number of squares followed by a number that represents the colour of those squares (based on the key).

For example, the first pair (23 5) means that the first 23 squares are coloured blue (5). The next pair (1 1) means that the next 1 square is red (1). We have coloured those squares for you. Squares are coloured left to right along the rows, and the colour can go on to the next row.

HINT:

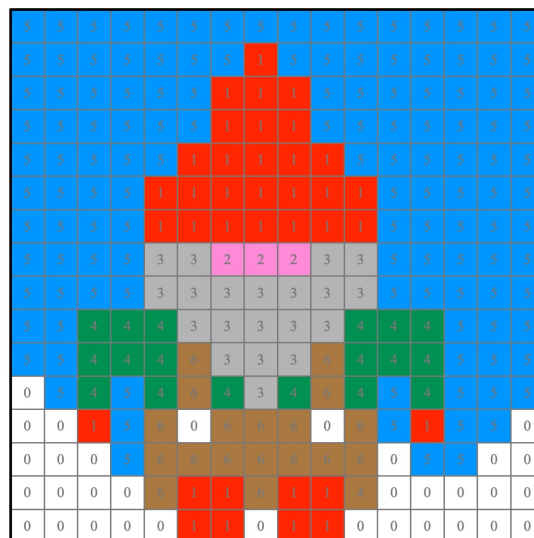
Remember the second number is always the colour. Cross off the pairs as you colour them in.



Colour in the grid and finish the picture from this information.

(23 5) (1 1) (14 5) (3 1) (13 5)
(3 1) (12 5) (5 1) (10 5) (7 1) (9 5)
(7 1) (9 5) (2 3) (3 2) (2 3)
(9 5) (7 3) (7 5) (3 4) (5 3) (3 4)
(5 5) (3 4) (1 6) (3 3) (1 6) (3 4)
(3 5) (1 0) (1 5) (1 4) (1 5) (1 4)
(1 6) (1 4) (1 3) (1 4) (1 6) (1 4)
(1 5) (1 4) (3 5) (2 0) (1 1) (1 5)
(1 6) (1 0) (3 6) (1 0)
(1 6) (1 5) (1 1) (2 5) (4 0) (1 5)
(7 6) (1 0) (2 5) (6 0) (1 6) (2 1)
(1 6) (2 1) (1 6) (10 0) (2 1)
(1 0) (2 1) (6 0)

Key	0	1	2	3	4	5	6
	White	Red	Pink	Grey	Green	Blue	Brown



Tick the circles when you have attempted the puzzle and so practised the skill.

Skill:
Representing
Data

Image by Mollyroselee from Pixabay