

Making a radio image

Radio telescopes don't see like we do. They can only see one small square at a time.

To take a picture of an object, they need to measure each little part of it, one piece at a time! This takes a long time, but in the end, all the parts make up one big picture!

Make your own radio images by colouring each number below a different colour.

For this picture, you'll need to use 6 different colours (for numbers 0, 1, 2, 3, 4 and 5)

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	4	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	3	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	2	2	2	0	0	2	2	2	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	2	2	2	4	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0
0	0	0	0	0	2	2	2	2	2	3	4	4	5	3	2	3	2	3	2	2	2	2	0	0	0	0	0	0	0
0	0	0	0	2	2	2	2	2	3	3	2	2	2	2	2	3	3	4	4	4	2	2	2	2	0	0	0	0	0
0	0	0	0	2	2	2	4	3	2	3	3	3	2	2	2	2	2	3	5	4	2	2	2	2	0	2	0	0	0
0	0	0	2	2	3	2	2	2	2	2	2	2	2	2	3	2	2	3	3	3	4	2	2	2	0	2	2	0	0
0	0	0	2	2	3	2	2	2	2	2	2	2	2	2	3	2	2	2	3	3	4	4	2	2	2	2	0	0	0
0	0	2	2	4	3	3	2	2	2	0	2	0	4	3	2	2	3	3	2	2	4	5	3	2	2	2	0	0	0
0	0	2	4	5	2	3	3	3	2	0	3	2	2	3	2	2	2	2	2	2	3	4	3	2	2	2	2	0	0
0	2	4	3	3	2	3	2	5	2	0	3	0	2	2	2	2	2	2	2	2	3	4	2	2	2	4	3	2	0
3	3	4	4	3	3	3	2	3	2	2	2	0	0	3	2	2	2	2	2	2	3	3	4	3	2	2	2	0	0
3	4	4	4	4	4	3	4	3	3	2	3	2	3	4	2	0	2	2	2	3	2	2	2	4	2	2	2	0	0
2	4	5	4	3	3	3	3	2	2	2	2	2	3	4	2	2	2	2	2	2	2	2	3	2	2	2	0	0	0
0	2	3	4	3	2	2	2	2	2	2	2	2	2	3	2	2	2	2	2	2	2	2	2	3	2	2	2	2	0
0	2	2	3	3	2	3	2	3	4	2	2	2	2	3	3	2	2	2	2	2	2	2	2	2	0	0	2	2	2
0	2	3	4	3	2	3	2	2	3	3	3	2	3	3	2	2	0	0	2	2	2	2	2	2	0	0	2	3	2
0	0	3	5	3	3	4	5	4	2	4	3	3	2	2	2	2	2	0	2	2	2	2	2	2	0	0	0	2	3
0	0	2	2	3	4	3	2	4	3	2	3	3	2	2	2	2	2	2	2	2	3	3	2	3	2	2	0	0	0
0	0	0	2	3	3	4	3	3	3	3	3	4	3	2	2	3	2	2	4	5	4	2	3	2	2	0	0	2	0
0	0	0	2	2	3	4	4	3	2	2	2	2	2	2	3	2	3	3	3	4	2	2	2	2	0	0	0	0	0
0	0	0	0	2	2	2	4	4	3	4	4	4	4	3	4	3	4	3	3	2	2	2	2	2	0	0	0	0	0
0	0	0	0	0	2	2	3	4	3	4	4	4	4	3	4	3	3	2	2	2	2	2	2	2	0	0	0	0	0
0	0	0	0	0	0	2	2	2	2	2	4	3	2	3	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0
0	0	0	0	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0
0	0	0	0	0	0	0	2	2	3	3	4	3	2	3	2	2	2	2	2	2	2	2	2	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	2	0	2	2	4	5	4	2	2	2	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Making a radio image

For this picture, you'll need to use 7 different colours (for numbers 0, 1, 2, 3, 4, 5 and 6)

0	0	0	4	4	4	4	5	5	5	4	0	0	0	0	0	0	0	0	0	4	4	4	5	4	4	0	0	0	0		
0	0	4	4	4	4	5	5	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4	5	4	4	0	0	0	0		
0	4	4	4	4	4	5	5	0	0	0	0	0	0	4	4	4	0	0	0	0	0	0	4	4	5	4	0	0	0		
0	4	4	4	4	4	0	0	0	0	4	4	4	4	4	5	5	4	4	0	0	0	0	0	4	4	5	4	0	0		
4	4	4	4	0	0	0	0	4	4	4	4	4	5	5	4	6	6	5	0	4	0	0	0	0	0	4	4	5	0	0	
4	4	4	0	0	0	0	4	4	4	5	5	4	4	5	6	6	5	5	4	4	0	0	0	0	0	0	4	4	5	5	
4	4	4	0	0	0	0	4	4	5	5	4	4	4	4	4	4	4	4	5	4	4	4	0	0	0	0	0	0	0	0	
4	4	0	0	0	0	4	5	4	4	0	0	0	0	0	0	0	4	4	4	5	4	4	0	0	0	0	0	0	0	0	
4	4	0	0	0	0	4	5	5	0	0	0	0	0	0	0	0	0	4	4	4	5	5	4	0	0	0	0	0	0	0	
4	4	0	0	0	4	5	5	5	0	0	0	0	0	0	0	0	0	0	4	4	4	6	6	4	4	4	0	0	0	0	
4	4	0	0	4	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	4	4	4	4	0	0	
4	4	0	0	5	4	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	4	4	4	0	0	0	
4	4	0	0	4	4	5	0	0	0	0	0	0	0	3	3	3	3	0	0	0	0	0	0	4	5	6	4	4	0	0	
4	0	0	4	5	4	5	0	0	0	0	0	0	0	3	2	2	3	3	3	0	0	0	0	0	4	6	4	4	4	0	
4	0	4	4	5	5	0	0	0	0	0	3	3	2	0	2	3	4	4	4	4	4	4	0	0	4	6	6	4	0	0	
4	0	4	4	5	5	0	0	0	0	0	2	2	2	0	0	2	3	4	4	4	4	4	4	0	0	4	4	4	4	4	
4	4	0	4	5	5	0	0	0	0	0	2	2	0	0	0	0	2	3	4	4	4	4	0	0	0	0	4	4	4	4	
4	4	0	0	4	4	5	0	0	0	0	2	0	0	0	0	0	2	2	0	4	4	4	4	0	0	0	0	4	4	4	
4	4	0	0	4	4	0	0	0	0	2	2	2	0	4	4	0	2	2	0	0	0	4	4	5	0	0	0	4	4	4	
4	4	0	0	4	4	4	0	0	0	3	3	2	0	4	4	0	0	2	0	0	0	0	4	5	4	0	0	4	4	4	
4	4	0	0	0	4	4	4	0	0	0	3	2	0	0	0	2	2	2	0	0	0	0	5	4	4	0	0	4	4	4	
4	4	4	0	0	4	4	4	0	0	0	0	2	2	2	2	0	2	2	0	0	0	4	5	4	4	0	0	0	4	4	
4	4	4	0	0	0	4	4	0	0	0	0	0	0	3	3	2	2	2	0	0	0	0	5	4	4	4	0	0	0	4	4
4	4	4	0	0	0	4	4	4	0	0	0	0	0	0	0	2	2	3	3	0	0	0	0	5	5	4	4	0	0	4	4
4	4	4	0	0	0	0	0	4	4	0	0	0	0	0	0	2	2	3	3	0	0	0	4	4	5	4	0	0	4	4	
4	4	4	4	0	0	0	0	4	4	0	0	0	0	0	5	5	4	4	0	0	0	0	4	4	4	4	0	4	4	4	4
4	4	4	4	0	0	0	5	4	4	4	4	4	4	4	5	5	4	4	0	0	0	0	4	4	4	4	0	0	4	4	4
4	4	4	4	0	0	0	0	4	5	5	5	4	4	4	5	4	5	0	0	0	0	6	5	4	0	0	0	5	5	4	4
0	5	4	4	4	0	0	0	0	4	4	5	5	5	4	0	0	0	0	0	0	4	6	5	4	0	0	0	4	5	4	
0	5	5	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	6	6	5	0	0	0	4	5	4	4	
0	5	6	5	4	0	0	0	0	0	0	0	0	0	0	0	0	4	4	6	5	5	4	0	0	0	0	4	5	6	6	
0	4	6	5	4	4	0	0	0	0	0	0	0	0	0	0	0	4	4	6	5	5	0	0	0	0	4	4	5	6	6	
0	0	6	6	5	5	4	4	4	4	4	4	5	4	4	4	0	0	4	4	4	5	5	0	0	0	0	4	4	6	6	
0	0	0	6	4	5	4	4	4	4	4	4	4	5	5	4	4	4	4	4	4	4	0	0	0	0	4	4	4	5	0	
0	0	0	0	6	5	4	4	5	4	4	4	4	5	5	4	4	4	4	0	0	0	0	0	0	0	5	5	4	4	0	0
0	0	0	0	0	5	4	4	5	5	4	4	4	4	4	4	4	0	0	0	0	0	0	0	0	0	5	5	6	4	0	0
0	0	0	0	0	0	0	0	4	5	4	0	0	4	4	0	0	0	0	0	0	0	0	0	0	5	6	6	4	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5	5	6	6	4	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	5	6	6	4	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	5	5	5	4	4	4	4	0	0	0	0	0
0	0	0	0	0	0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	5	4	4	4	4	4	0	0	0	0	0