


Living in a Colourful World

by Bronwen Wall

When you look at a rainbow, how do you know that you see what everybody else sees? There are seven colours in a rainbow – red, orange, yellow, green, blue, indigo, violet – but some people see these colours differently because they are colour-blind.

If someone is colour-blind, it doesn't mean that they can't see colours. It just means they can't tell the difference between some colours.



Not everyone sees the same colours when they look at a rainbow.

Why are some people colour-blind?

Most people who are colour-blind are born that way. Some people may become colour-blind because of an accident or an illness.

Males are more likely than females to be colour-blind. In a group of two hundred girls, it's likely that one or two will be colour-blind, but in a group of two hundred boys, it's likely that about seventeen boys will be.

Types of colour-blindness

There are different types of colour-blindness. A few people can only see in black and white – but that type of colour-blindness is unusual. Most people who are colour-blind have difficulty seeing red and green. They see those colours as blue, yellow, or brown.



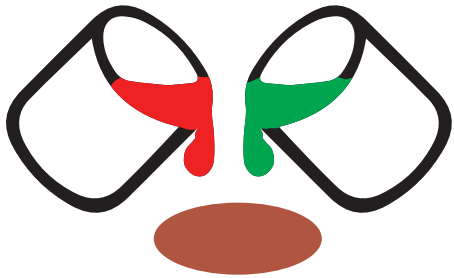
What colours do animals see?

A lot of animals are colour-blind, too. Cats and dogs can't see reds and greens. Mostly they see things as grey or sometimes as a kind of blue or yellow. They look at the movements and shapes of objects instead of their colours.



The primary colours

Red, blue, and yellow are called the primary colours. All other colours are made from the primary colours. If a person can't see red, they might mix up colours that have red in them. For example, they might not be able to see the difference between some of these colours:



brown

(a mix of red and green)



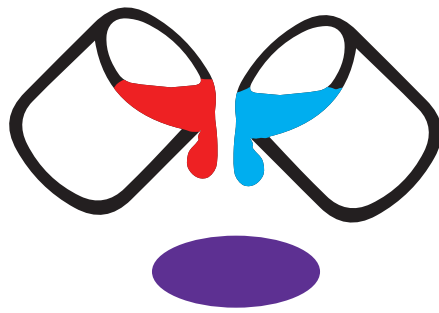
orange

(a mix of red and yellow)



pink

(a mix of red and white)

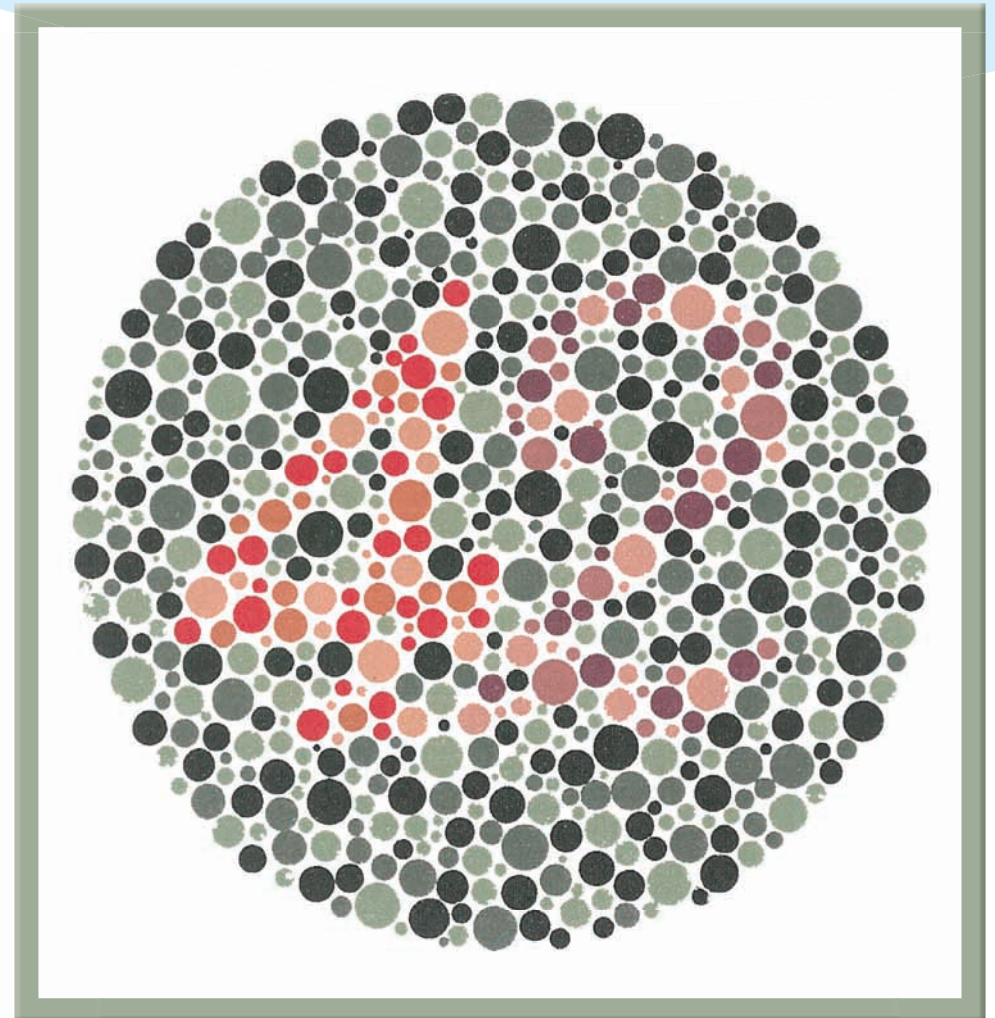


purple

(a mix of red and blue).

What colours can you see?

You can test yourself for colour-blindness. Can you see a number or pattern in these dots? If you don't see anything in the dots, you might be colour-blind.



Some problems of being colour-blind

It's not hard to live as a colour-blind person. Most of the time, we don't even need to think about the colours around us. But some things can be tricky to deal with.

A colour-blind person might:

- not notice that they have put on socks that are different colours
- mix up the pieces in a board game
- mix up red apples and green apples or not be able to tell when a tomato is ripe ... until they bite into it!



Can you think of anything else that a colour-blind person might have trouble with?



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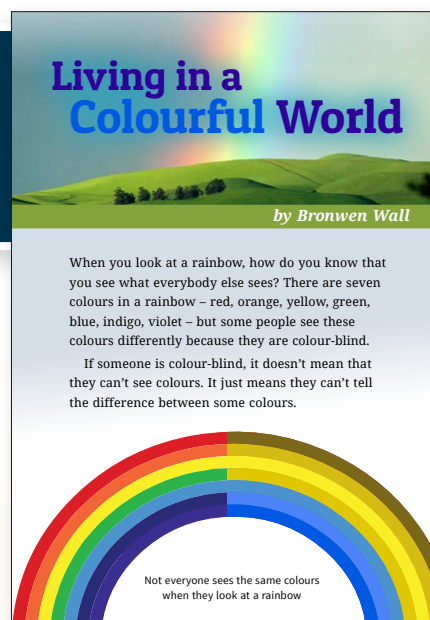
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