

**COLOUR BLIND
AWARENESS**



Colour blindness is one of the world's most common inherited conditions affecting:

- ▶ 3 million people in the UK (300+ million people worldwide)
- ▶ 1 in 12 males/boys and 1 in 200 females/girls
- ▶ At least 1 child in every class of 30

Most cases of colour blindness are hereditary, passed down the mother's side of the family. So, if any uncles, great uncles, grandfathers or cousins have colour vision deficiency (CVD), contact them – they can be a great support for both you and your child, sharing their experience of CVD and passing on advice.

What is colour blindness?

We see colour through three specific types of cone cells in our eyes, one type absorbs red light, the second green and the third blue. With inherited CVD, one cone type doesn't function normally. Most cases of CVD arise from a defect in the red or green cone types, this is commonly known as 'red/green colour blindness' (see *images*). However, colour blindness can affect many other colour combinations.

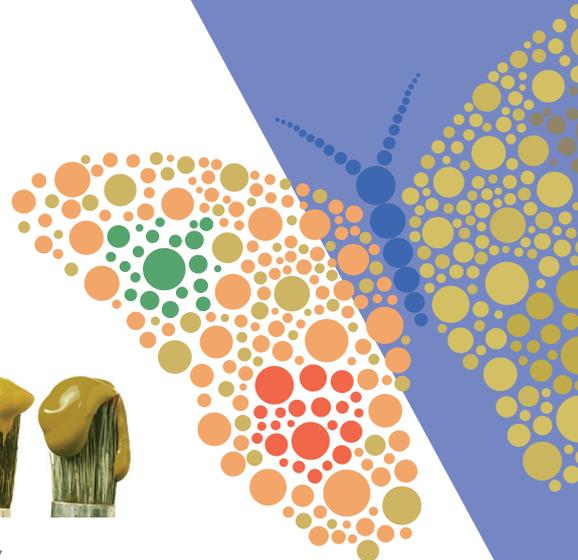
Images: left, normal colour vision, right, severe green deficiency

Advice sheet for Parents of Young Children (aged 3 to 7 years)



Normal colour vision

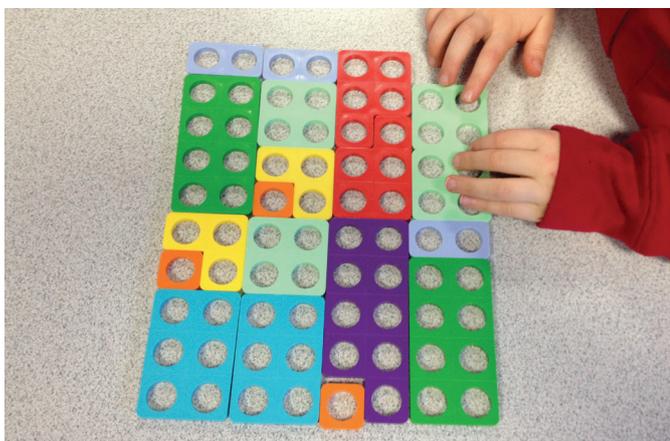
Severe green deficiency



How it affects your child's everyday life

Although children with CVD lead perfectly normal lives (which is why the condition often goes undiagnosed), colour blindness can put them at a distinct disadvantage – especially at school – in situations where colour is used as a way of communicating information. For example, a child with CVD may have difficulty participating in group activities that require colour recognition or when reading words highlighted in different colours.

With proper support children can learn coping techniques, but it's important parents realise that colour blind children tend to try and hide their problems. Equally, due to their colour blindness, they may not always know whether they can or can't see something.



Normal colour vision



Severe red deficiency

Therefore parents need to be particularly alert to picking up the signs of colour blindness, especially at an early age. It is easy to think that your child is coping well with CVD because children can learn to identify the colour of

their toys and belongings based on the colour that they've been *told* it is. This is not the same, however, as being able to see the same colour as everyone else, which means it's important to stay vigilant and aware of potential problems in different environments.

You can help your child to hone their coping techniques by spotting signs that they may need extra help. Teachers can also play a key role in supporting your child once they start nursery or primary school, so make sure you tell the school/nursery about your child's diagnosis as soon as possible and refer them to the *Teachers section* on our website (*see below*).

If in doubt, take action

Your child is likely to need more time processing information that uses colour, as they will be searching for other (non-colour) clues. There are other key signs to watch out for, at home and at school, that indicate your child may need extra support, for example, if your child:

- Uses inappropriate colours in drawing or painting – e.g. purple leaves on trees, brown grass, red dog
- Is reluctant to play matching, counting or sorting games with coloured pieces
- Has a low attention span when colouring in homework sheets
- Is confused about who is in their team or group when coloured bibs or armbands are used

Ways you can help

- Buy labelled pencil crayons
- Find ways to add extra information e.g. for pieces in a matching game, to help children who can already read, you can write out colour names or use capital letters; for younger children, you could use a symbol such as a frog for 'green' or a banana for 'yellow'
- Encourage your child to tell their teacher or coach if they can't tell coloured bibs apart so that other colours that they can see, such as blue and yellow, can be used instead

Further information and resources

For more information and resources, including downloadable information, classroom resources and links to videos, visit www.colourblindawareness.org, and see our online shop www.colourblindawareness.org/about-us/online-shop/, plus articles in the Press/Education section. Teachers can go to www.colourblindawareness.org/teachers/resources for a fully interactive Resource Guide.