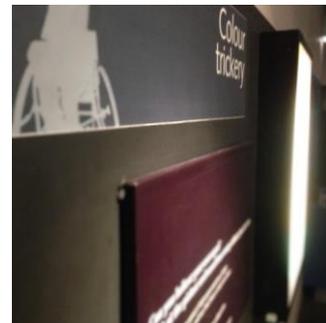


Colour trickery



Location

First floor, Curiosity zone exhibition

In a nutshell

Do you see a blue and a green spiral?
Is it possible they are an identical colour?

What to do

Look at the exhibit; can you see two different coloured spirals? Now compare the different spirals with the bar of colour at the bottom of the exhibit. You should be able to see that actually both spirals are green rather than two different colours.

Time Required

KS3 & KS4 2-3 minutes per student.

What's happening?

This amazing illusion has been created by Japanese vision expert Akiyoshi Kitaoka.

Scientists are not really sure how your brain creates two such different coloured spirals from a single 'colour'. However, it is likely to be related to the different colours that are on top of and behind both spirals.

Look closely at the 'green' spiral – the lines of colour on top of it are orange, and it sits on a pink background. Now look at the opposite situation for the 'blue' spiral. Here the lines on top of the spiral are pink whilst it sits on an orange background.

As with all illusions, scientists use them to understand more about how our brains interpret the world. At the moment, they think this illusion is caused because of something happening at the T-junctions – the places where the spiral, background and foreground colours meet.

Curriculum links

KS3	Art & Design <ul style="list-style-type: none"> - to analyse and evaluate their own work, and that of others, in order to strengthen the visual impact or applications of their work
KS4	Psychology The Brain and Neuropsychology <ul style="list-style-type: none"> - the basic actions of the brain and the nervous system, what neurons and synapses are, and how they interact Perception <ul style="list-style-type: none"> - explanations of sensation and perception, including the Direct Theory of Perception (Gibson) and the Constructivist Theory of Perception (Gregory) - monocular and binocular depth cues, visual cues, visual illusions, and visual constancies, and the reasons for these - perceptual set and the effects of the following factors on perception: motivation, expectation, emotion, and culture English - Spoken <ul style="list-style-type: none"> - listening to and building on the contributions of others, asking questions to clarify and inform, and challenging courteously when necessary

Relates to:

Workshops & Theme Days	Shows	Trails	Other exhibits
<ul style="list-style-type: none"> • Brain Lab (KS3 & KS4) • Experience psychology (KS4) 	<ul style="list-style-type: none"> • Boggling Brains (KS3 & KS4) • How my body works (KS3) 		<ul style="list-style-type: none"> • Eye witness • Cafe wall illusion • Push over • Funny faces • In a spin

