

# Funny faces

## Location

Ground floor, All About Us exhibition

## In a nutshell

Are you a face expert? We have evolved to see faces as convex, seeing a concave face has an interesting effect on our brain.

## What to do

Students view a variety of illusions involving faces. Can they see a nose following them?

## Time Required

KS3 & KS4 2-3 minutes per student.

## What's happening?

Your brain uses shortcuts to help it analyse and make sense of all the data coming from the senses, in this case it uses the knowledge that noses stick out to make sense of what your eyes are looking at. But in this case the face is concave so gets it wrong.

When we rely on what is familiar, we don't always get it right. However the amazing thing about our brains is how few times they get it wrong. Think about the number of illusions you have seen and compare it to everything else you have ever looked at! The hollow face is just one of many optical illusions that involve our ability to recognise faces.



## Curriculum links

Curriculum links	
<b>KS3</b>	<p><b>Science - Light</b></p> <ul style="list-style-type: none"> <li>- the transmission of light through materials: absorption, diffuse scattering and specular reflection at a surface</li> <li>- use of ray model to explain imaging in mirrors, the pinhole camera, the refraction of light and action of convex lens in focusing (qualitative); the human eye</li> </ul> <p><b>English - Reading</b></p> <ul style="list-style-type: none"> <li>- learning new vocabulary, relating it explicitly to known vocabulary and understanding it with the help of context and dictionaries</li> </ul> <p><b>English - Spoken</b></p> <ul style="list-style-type: none"> <li>- using Standard English confidently in a range of formal and informal contexts, including classroom discussion</li> </ul>
<b>KS4</b>	<p><b>Psychology - Perception</b></p> <ul style="list-style-type: none"> <li>- explanations of sensation and perception, including the Direct Theory of Perception (Gibson) and the Constructivist Theory of Perception (Gregory)</li> <li>- monocular and binocular depth cues, visual cues, visual illusions, and visual constancies, and the reasons for these</li> <li>- perceptual set and the effects of the following factors on perception: motivation, expectation, emotion, and culture</li> </ul> <p><b>English - Spoken</b></p> <ul style="list-style-type: none"> <li>- listening to and building on the contributions of others, asking questions to clarify and inform, and challenging courteously when necessary</li> </ul>

## Relates to:

Workshops & Theme Days	Shows	Trails	Other exhibits
<ul style="list-style-type: none"> <li>• Experience psychology (KS4)</li> </ul>	<ul style="list-style-type: none"> <li>• Boggling Brains (KS3 &amp; KS4)</li> <li>• How my body works (KS3)</li> </ul>		<ul style="list-style-type: none"> <li>• Eye witness</li> <li>• Motion disabled</li> <li>• Divided self</li> <li>• In a spin</li> <li>• Push over</li> </ul>

