

Blood vessels of the eye

Location

Ground floor, All About Us exhibition

In a nutshell

Can you see the tiny bright specks? This exhibit shines a light on the blood system supplying the eye.



What to do

Students have a seat and look through the view finder with one eye. A light shines on their eyes allowing them to see a reflection of the blood circulating within the eye.

Time Required

KS3 & KS4 1-2 minutes per student.

What's happening?

The bright specks are caused by light bending around blood cells moving through capillaries in the eye.

Although they are always there we don't normally see them because of their size. Their diameter is only a few thousandths of a millimetre.

The blood cells are pushed along by our heartbeat, so they move in time with our pulse. If the heart speeds up, the rhythm of the specks can be seen speeding up as well.

Curriculum links

Curriculum links	
KS3	<p>Science - Light waves</p> <ul style="list-style-type: none"> - the transmission of light through materials: absorption, diffuse scattering and specular reflection at a surface <p>English - Reading</p> <ul style="list-style-type: none"> - learning new vocabulary, relating it explicitly to known vocabulary and understanding it with the help of context and dictionaries <p>Mathematics - Number</p> <ul style="list-style-type: none"> - understand and use place value for decimals, measures and integers of any size - use standard units of mass, length, time, money and other measures, including with decimal quantities <p>Design & Technology</p> <ul style="list-style-type: none"> - understand how more advanced electrical and electronic systems can be powered and used in their products [for example, circuits with heat, light, sound and movement as inputs and outputs]
KS4	<p>Science - Human circulatory system</p> <ul style="list-style-type: none"> - describe the human circulatory system, including the relationship with the gaseous exchange system, and explain how the structure of the heart and the blood vessels are adapted to their functions <p>Mathematics - Ratio, proportion and rates of change</p> <ul style="list-style-type: none"> - change freely between related standard units (e.g. time, length, area, volume/capacity, mass) and compound units (e.g. speed, rates of pay, prices, density, pressure) in numerical and algebraic contexts <p>Design and technology</p> <ul style="list-style-type: none"> - how electronic systems provide functionality to products and processes, including sensors and control devices to respond to a variety of inputs, and devices to produce a range of outputs

Relates to:

Workshops & Theme Days	Shows	Trails	Other exhibits
<ul style="list-style-type: none"> • Choose Health (KS3 lower) 	<ul style="list-style-type: none"> • How my body works (KS3) 		<ul style="list-style-type: none"> • Heart electric • Pupil • Vein viewer

