

8Ka – What a picture!/Travelling light

Word	Pronunciation	Meaning
digital camera		A camera that uses electronics (instead of film) to record an image.
image		A picture that forms in a mirror or on a screen, or is made by lenses.
luminous sources	<i>loo-min-us</i>	Objects that create light.
non-luminous		Object that do not create light.
ray		A narrow beam of light. We draw arrows to represent rays and show the direction in which light is moving.
shadow		A place where light cannot get to, because an opaque object is blocking the light.
source		An object that creates something.

8Kb – Cameras and eyes

Word	Pronunciation	Meaning
absorb		To 'soak up' or 'take in'. If something absorbs light it soaks it up and does not let it back out.
opaque	<i>O-pake</i>	Material that does not let light through.
pinhole camera		Something that forms an image of an object on a screen when light rays travel through a tiny hole in the front.
pupil		The hole in the front of the eye that light can pass through.
reflect		To bounce off something.
retina		The part at the back of the eye that converts light into electrical signals.
sensor		An instrument that detects something. In a digital camera, the sensors detect light and convert it to electrical signals.
translucent	<i>trans-loo-sent</i>	Material through which a glow of light can be seen.
transmit		To send along or pass through.
transparent		Material that light can travel through.
view finder		Part of a camera that you look through to make sure you get the right things in the photograph.

8Kc – Mirror image

Word	Pronunciation	Meaning
angle of incidence	<i>in-sid-dense</i>	Angle between an incoming light ray and the normal.
angle of reflection		The angle between the normal and the ray of light leaving a mirror.
incident ray		A ray of light going towards the mirror or other object.
normal		An imaginary line at right angles to the surface of a mirror or other object where a ray of light hits it.
plane mirror		A smooth, flat mirror.

Word	Pronunciation	Meaning
ray diagram		A diagram showing the passage of light rays.
reflected ray		A ray of light bouncing off a mirror.
scatter		Spread out in all directions.

8Kd – Lenses and light

Word	Pronunciation	Meaning
angle of refraction		The angle between the normal and a ray of light that has been refracted.
converging lens		A lens that makes rays of light come together. Another name for a convex lens.
interface		The boundary between two materials.
lens		A curved piece of glass or other transparent material that can change the direction of rays of light.
refraction		The change in direction when light goes from one transparent material to another.

8Ke – Making rainbows

Word	Pronunciation	Meaning
dispersion		The separating of the colours in light, for example when white light passes through a prism.
filter		Something that only lets certain colours through and absorbs the rest.
prism		A block of clear, colourless glass plastic. Usually triangular.
spectrum		The seven colours of light.
white light		Normal daylight, or the light from light bulbs, is white light.

8Ke – Focus on: Seeing colours

Word	Pronunciation	Meaning
cone cells		The cells in the retina that detect different colours of light.
cyan	<i>syə-an</i>	Secondary colour made by mixing green and blue light (greeny blue).
infrared		A 'colour' of light beyond red. We can feel this as heat, but we cannot see it.
magenta	<i>ma-jen-ta</i>	Secondary colour made by mixing red and blue light (pinkish red).
primary colours		The three main colours which can make white light (red, green and blue).
rods		The cells in the retina that detect low levels of light. They cannot detect different colours.
secondary colours		The colours made when two primary colours mix.
ultraviolet		A 'colour' of light beyond violet. We cannot see ultraviolet light, but some animals (such as insects) can.