Light

Answers

KS3 science quick questions

This topic online

Activate 1: Light | Exploring Science 8J

Q	Answer	Remember
1	luminous	The Moon is not luminous - it only reflects sunlight.
2	opaque	Opaque objects block light, which is why they cast shadows.
3	transparent	Transparent: you can see clearly through it.
4	translucent	Translucent lets light through but scatters it, so images are blurred.
5	reflection	Smooth shiny surfaces give a clear reflection.
6	35°	The angle of incidence always equals the angle of reflection.
7	normal	Always measure from the normal, never from the mirror surface.
8	refraction	Light changes speed when it enters a new material, and that bends it.
9	prism	Each colour bends by a different amount, so they fan out.
10	convex	Convex bulges out and brings rays together, like a magnifying glass.
11	violet	Red bends least, violet bends most.
12	retina	The lens focuses light onto the retina, which sends signals to the brain.
13	red	A filter lets its own colour through and absorbs the rest.
14	absorbs	We see the colour an object reflects into our eyes.
15	towards	Into a denser material: towards the normal. Out into a less dense one: away from it.
16	black	The blue shirt absorbs red light and there is no blue light to reflect, so no light reaches your eye.
17	150 000 000 km	Distance = speed × time = 300 000 × 500 = 150 million km.
18	concave	A concave lens spreads the rays out a little first, so they meet on the retina.
19	upside down	Light travels in straight lines, so rays from the top of the object cross over through the hole and land at the bottom.
20	Light from a source such as a lamp hits the book, reflects off it (scattered) and travels into your eyes.	Most things we see are not luminous - we see them by reflected light.

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