

# Facts About Light

Visible light is a form of wave energy and the only part of the electromagnetic spectrum that we can see.



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<b>The Light Spectrum</b>	<p>Light waves of a specific energy level will emit a particular color.</p> <hr/> <p>Sir Isaac Newton recognized the visible light spectrum in 1666, and he identified seven colors: red, orange, yellow, green, blue, indigo, and violet.</p> <hr/> <p>Newton's colors are arbitrary segments of the continuous spectrum of color.</p> <hr/> <p>When all of the spectral colors travel together, they combine to make white light.</p>
<b>The Speed of Light</b>	<p>Transparent materials cause light to refract, or bend its path, because light travels at different speeds in different mediums, like water or glass.</p> <hr/> <p>The speed depends on the composition and density of the medium—how many atoms are getting in the way.</p> <hr/> <p>The reduction in speed causes light to bend upon entry into that medium. Since different wavelengths of light bend at different angles, certain materials can act as prisms, causing white light to visibly split apart into its spectrum.</p>
<b>The Properties of Light</b>	<p>Light can also reflect, or bounce, off objects. This is what causes us to see.</p> <hr/> <p>Light rays emitted from a light source reflect off objects in all directions and transmit the image of that object to your eye.</p> <hr/> <p>Objects with very smooth surfaces, like mirrors, reflect light so well that they redirect it in a single direction.</p>

