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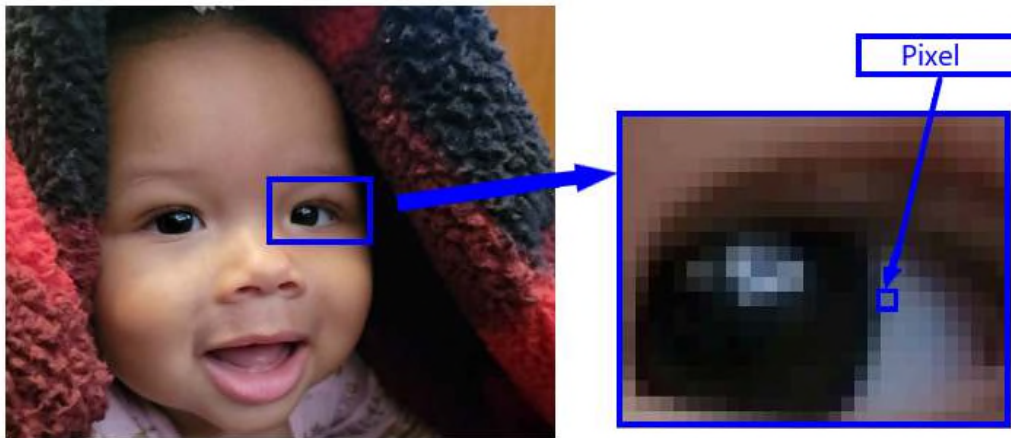
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## What is a pixel and how does it form a picture?

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A **pixel**, short for "**picture element**", is the unit of measurement for the size and quality of a digital image or display. In digital photography, it refers to the smallest unit of a digital image captured by a camera's image sensor. Each pixel represents a specific color and brightness value, collectively forming the photograph. A cross-section of an image, when magnified, shows the individual pixel:



The number of pixels in an image sensor determines the resolution and detail captured by the camera. **Resolution** refers to the number of pixels in a digital image or display and is typically expressed as the total number of pixels horizontally and vertically. For example, a resolution of **1920 x1080** means there are 1920 pixels in width and 1080 pixels in height. The higher the resolution, the more pixels there are, resulting in a clearer and more detailed image.

A specification for image resolution is a **megapixel**, which is equal to one million pixels. It is commonly used to measure the resolution of digital cameras and the quality of digital images. For example, a camera with a 12-megapixel sensor can capture images with a resolution of approximately 12 million pixels, resulting in higher detail and clarity. Higher megapixel counts are generally associated with higher-resolution images.

To determine the resolution for your camera, refer to your **Help Guide**.

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