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Color

The science of color is called chromatics, or color science. Color is the way the brain interprets different wavelengths of electromagnetic radiation as perceived by the eyes, or in other words it's how the brain perceives visible light. When light shines on an object some colors bounce off the object and others are absorbed by it. Our eyes only see the colors that are bounced off or reflected.
Three laws of motion when coupled with Newton’s law of gravity form the basis for explaining both the motions seen on the earth and the motions of the heavenly bodies.

In the sixteenth century, Polish astronomer Nicolaus Copernicus (1473–1543) suggested that Earth and other planets orbited the sun, but his model contained no physics. It did not say why the planets should orbit the sun. Galileo was censured by the Catholic Church and forced to recant his belief in the Copernican model. He then realized that to ultimately win, the Copernican model needed a physical basis. Galileo therefore started to quietly develop the new physics needed to explain planetary motions. Newton, who was born the year Galileo died, built on...
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HISTORY

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Laws of motion

Author: Paul A. Hebert
Editors: K. Lee Lerner and Brenda Wilmoth Lerner
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Newton's three laws

1. The first of Newton's laws states an object will continue its motion at a constant velocity until an outside force acts on it. The block continues to move as long as one applies a force. When the force stops, the block stops moving. The block will continue to slide for a while after one stops applying a force. The pushing is not the only force acting on the block. There is also a frictional force opposing the motion. The block sliding across the floor stops because the frictional force acts on it. The block on an icy surface takes longer to stop because there is less frictional force. If one could slide the block across a surface with absolutely no friction, it would never stop. The block would keep moving until some outside force, such as the wall of the room, stopped it. A block on a lever surface, without application of force, will not move unless something applies an outside force.

2. The first of Newton's laws states an object will continue its motion at a constant velocity until an outside force acts on it. The block has a tendency to continue in its state of motion, whatever that state might be, until some force changes that state of motion. This tendency to continue in a state of motion is called the object's inertia. An object at rest simply has a constant velocity of zero, and it needs an outside force to start moving. The physicist's definition of velocity includes both speed and direction, so any deviation from straight-line motion is a change in velocity and will require an outside force. The object's inertia causes it to continue to move at a constant (in a straight line) velocity (or stay at rest) until an outside force acts on it.

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