

SPORTS BIOMECHANICS

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Biomechanical Terms

By

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Biomechanical Terms

- **Velocity** - Speed and direction of the body
- **Acceleration** - Change in velocity involving the speed or direction
- **Angular velocity** - Angle that is rotated in a given unit of time
- **Angular acceleration** - Change of angular velocity for a unit of time

Biomechanical Terms

- **Mass** - Amount of matter possessed by an object
- **Force** - Any action that changes or tends to change the motion of an object
- **Pressure** - Ratio of force to the area over which force is applied
- **Gravity** - Natural force that pulls all objects toward the center of the earth
- **Center of gravity**

Biomechanical Terms

- **Friction** - Force that occurs when surfaces come in contact and results from the sliding of one surface on the other
- **Work** - Force that is applied to a body through a distance and in direction of the force
- **Power** - Amount of work accomplished in one unit of time
- **Energy** - Capacity of the body to perform work
 - Kinetic energy • Potential energy • Torque
 - Twisting, turning, or rotary force related to the production of angular acceleration