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Movement analysis: definitions of key terms



See pages 47–54

These are the key terms from Chapter 2. Try cutting them out and then matching the key terms with their definitions or asking friends and family to test you. They could give you the key term and ask you to provide the definition or give you the definition and ask you to provide the key term.

Axis	An imaginary line around which a body or body part can turn. "Axes" is the plural of axis.
Class of lever	The type of lever. There are first class, second class and third class levers.
Effort	The source of the energy. For example, muscles in the body.
Effort arm	The distance from the effort to the fulcrum.
Frontal axis	An imaginary line passing horizontally through the body from left to right, allowing flexion and extension.
Frontal plane	An imaginary line dividing the body vertically from front to back. Movement occurs in the frontal plane about the sagittal axis. For example, when performing a star jump.
Fulcrum	A fixed pivot point. For example, a joint in the body.
Lever	A rigid bar or object that moves around a fixed fulcrum with two forces applied to it.

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Load	The weight/resistance to be moved. For example, a body part plus anything held or resistance met.
Load arm	The distance from the load to the fulcrum.
Mechanical advantage	Second class levers allow a large load to be moved with a relatively small amount of muscular effort.
Mechanical disadvantage	Third class levers cannot lift such heavy loads, with the same amount of effort, as second class levers due to the position of the fulcrum in relation to the effort and load.
Plane	An imaginary line dividing the body into two.
Sagittal axis	An imaginary line passing horizontally through the body from front to back, allowing abduction and adduction.
Sagittal plane	An imaginary line dividing the body vertically into left and right sides. Movement occurs in the sagittal plane around the frontal axis. For example, when performing a somersault.
Transverse plane	An imaginary line dividing the body horizontally from front to back. Movement occurs in the transverse plane around the vertical axis. For example, when performing a full twist jump.
Vertical axis	An imaginary line passing vertically through the body, allowing rotation of the body in an upright position.