Movement analysis: definitions of key terms



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.

Abduction	movement of a bone or limb away from the midline of the body
Adduction	movement of a bone or limb towards the midline of the body
Axis	an imaginary straight line through the body around which it rotates. There are three types of axis: sagittal, transverse and longitudinal
Dorsiflexion	movement at the ankle joint that flexes the foot upwards and decreases the angle at the ankle joint
Effort	the force required to move the load. It can also be referred to as 'force'
Effort arm	the distance from the effort to the fulcrum
Extension	increase in the angle of bones at a joint
Flexion	decrease in the angle of bones at a joint
Frontal plane	runs left to right and divides the body into front and back halves
Fulcrum	the fixed point at which a lever turns or is supported. It can also be referred to as the 'axis'

2 Movement analysis: definitions of key terms

Lever	a rigid bar that turns about an axis to create movement. All levers contain a fulcrum, load and effort
Load	the weight or 'resistance' that the lever must move
Load arm	the distance from the load to the fulcrum
Longitudinal axis	runs vertically through the body, from head to toe
Mechanical advantage	measures the efficiency of a lever. It is calculated as follows: $ \frac{\text{effort arm}}{\text{load (resistance) arm}} $
Plane	an imaginary line that splits the body in two and depicts the direction of movement. There are three types of plane: frontal, transverse and sagittal
Plantar flexion	movement at the ankle joint that points the toes and increases the angle at the ankle joint
Rotation	a circular movement around a joint or, in other words, a movement around an axis
Sagittal axis	runs horizontally through the body from front to back, through the belly button
Sagittal plane	runs forwards and backwards and divides the body into left and right halves
Transverse axis	runs horizontally through the body from left to right at the hips
Transverse plane	divides the body in half horizontally