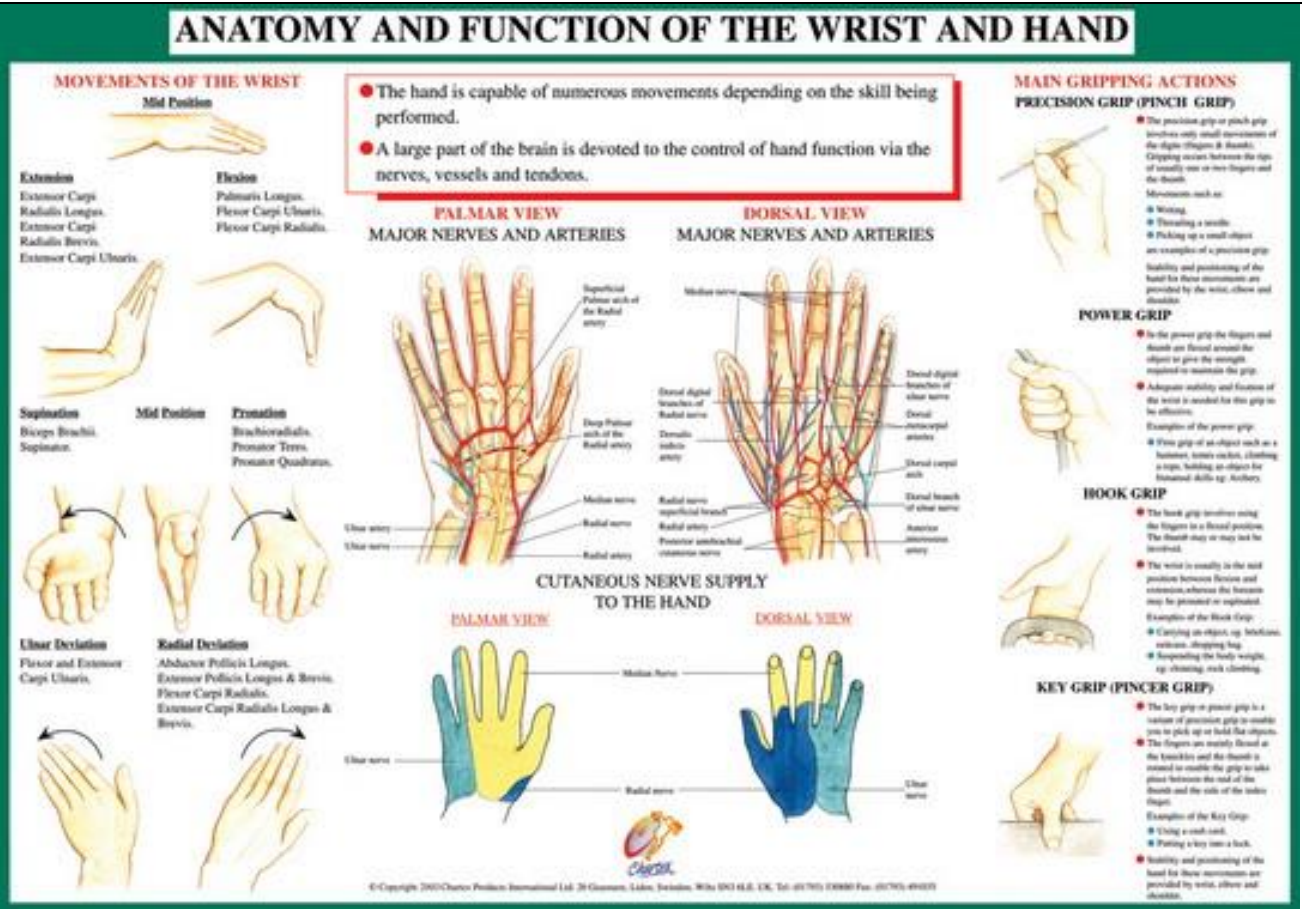


Function of Hand & Wrist Chart – CT088

<p>Description</p>	<p>◆ This chart shows the movements of the wrist, main gripping actions as well as the palmar and dorsal views of the major nerves and arteries of the hand. The hand is capable of numerous movements depending on the skill performed. The chart shows and lists the muscles working in extension, flexion, supination, pronation, ulnar deviation and radial deviation. The main gripping actions such as the precision grip (pinch grip), power grip, hook grip and key grip (pincer grip) are described and illustrated to show how important the hand is to many of the daily functions in which we participate. This chart links to the anatomy chart which shows the muscles, bones and ligaments and is ideal for : Occupational Therapists, Physiotherapists, Schools of physiotherapy, Colleges of P.E., and Fitness Instructors.</p>
<p>Details</p>	<p>1. Dimension: A2 Size</p>
<p>Image</p>	 <p>ANATOMY AND FUNCTION OF THE WRIST AND HAND</p> <p>MOVEMENTS OF THE WRIST</p> <ul style="list-style-type: none"> Mid Position Extension: Extensor Carpi Radialis Longus, Extensor Carpi Radialis Brevis, Extensor Carpi Ulnaris. Flexion: Palmaris Longus, Flexor Carpi Ulnaris, Flexor Carpi Radialis. Supination: Digastric Brachii, Supinator. Mid Position Pronation: Brachioradialis, Pronator Teres, Pronator Quadratus. Ulnar Deviation: Flexor and Extensor Carpi Ulnaris. Radial Deviation: Abductor Pollicis Longus, Extensor Pollicis Longus & Brevis, Flexor Carpi Radialis, Extensor Carpi Radialis Longus & Brevis. <p>MAJOR NERVES AND ARTERIES</p> <ul style="list-style-type: none"> PALMAR VIEW: Superficial Palmar arch of the Radial artery, Deep Palmar arch of the Radial artery, Ulnar artery, Ulnar nerve, Median nerve, Radial nerve, Radial artery, Radial nerve superficial branch, Radial nerve, Proximal interdigital extensor nerve. DORSAL VIEW: Median nerve, Dorsal digital branches of other nerves, Dorsal interosseous artery, Ulnar carpal axis, Dorsal branch of other nerves, Axillary interosseous artery. <p>CUTANEOUS NERVE SUPPLY TO THE HAND</p> <ul style="list-style-type: none"> PALMAR VIEW: Ulnar nerve, Median nerve, Radial nerve. DORSAL VIEW: Ulnar nerve, Median nerve, Radial nerve. <p>MAIN GRIPPING ACTIONS</p> <ul style="list-style-type: none"> PRECISION GRIP (PINCH GRIP): <ul style="list-style-type: none"> The precision grip or pinch grip involves small movements of the digits (fingers & thumb). Gripping occurs between the tips of normally one or two fingers and the thumb. Movements such as: <ul style="list-style-type: none"> Writing Threading a needle Picking up a small object Examples of a precision grip: stability and positioning of the hand for these movements are provided by the wrist, elbow and shoulder. POWER GRIP: <ul style="list-style-type: none"> In the power grip the fingers and thumb are flexed around the object to give the strength required to maintain the grip. Adequate stability and fixation of the wrist is needed for this grip to be efficient. Examples of the power grip: <ul style="list-style-type: none"> Strong grip of an object such as a hammer, tennis racket, climbing a rope, holding an object for manual skills eg. Archery. HOOK GRIP: <ul style="list-style-type: none"> The hook grip involves using the fingers in a dorsal position. The thumb may or may not be involved. The wrist is usually in the neutral position between flexion and extension, whereas the forearm may be pronated or supinated. Examples of the Hook Grip: <ul style="list-style-type: none"> Clipping an object, eg. footballs, trousers, sleeping bag Supporting the body weight, eg. climbing rock climbing. KEY GRIP (PINCHER GRIP): <ul style="list-style-type: none"> The key grip or pincer grip is a variation of precision grip to enable one to pick up or hold the object. The fingers are normally flexed at the knuckles and the thumb is rotated to enable the grip to take place between the root of the thumb and the side of the index finger. Examples of the Key Grip: <ul style="list-style-type: none"> Using a nail-cut Pushing a key into a lock Stability and positioning of the hand for these movements are provided by wrist, elbow and shoulder. <p>©Copyright 2002 Charon Products International Ltd. 38 Gloucester, Lakes, Scotland. W85 5D3 H.L. UK. Tel: 01753 53880 Fax: 01753 49033</p>