

Grip and Manipulation Quick Guide

Below, you will find information and activities for the Grip and Manipulation Construct Progression. See the [NC Construct Progressions and Situations Book](#) for additional information and full references.

Why focus on grip and manipulation? Piaget (1954) was one of many developmental psychologists who linked motor skill development with improvements in perceptual and cognitive development. Researchers emphasize the importance of motor skill development and suggest that fine motor skills are a strong predictor of achievement, “attention, fine motor skills, and general knowledge are much stronger overall predictors of later math, reading, and science scores than early math and reading scores alone” (Grissmer et. al., 2010, p. 1008).

Grip and Manipulation: Children are learning to coordinate muscle groups to perform fine manipulation of objects and skilled use of tools, while moving towards fine motor skills performed automatically with a focus on content & outcome.

A. Uses a fist grip or palmar grasp to reach, manipulate or hold items (palmar grasp), with whole arm movement.	B. Uses thumb and fingers to manipulate objects (pincer grip), with whole arm movement and increased stability from the shoulder.	C. Uses refined wrist and finger movement, beginning to transfer control of movement from the shoulder to the elbow.	D. Uses hands with minimal elbow movement and primary control from wrist and fingers.	E. Hand movements are primarily controlled by actions from the wrist and fingers.
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FILM CANISTERS

Promotes: *pinch pattern, dexterity, eye-hand coordination, strengthening, pronation/supination of wrist*

Using two fingers, place beans/beads into slot on top of film canister. Use as a timed activity and/or number, color concept involvement.



MINI PLAYING CARDS

Promotes: *supination and pronation of wrists, pincer grasp (tip-to-tip,) dexterity*

Flip cards into 2-3 stacks by turning cards over from back to front. Include counting, sorting, and matching as appropriate.



POP BEADS

Promotes: *pinch pattern, grasp/dexterity, strengthening, bilateral coordination, eye-hand coordination*

Push together and pull apart. Use for sequencing, counting, and color recognition.



SPIN TOPS

Promotes: *individuation of digits opposition of digits, pincer grasp (tip-to-tip,) dexterity, separation of two sides of the hand, coordination*

Use as a timed activity. Grade activity by incorporating 1 or more spin tops at once.



THERAPY PUTTY

Promotes: *strengthening, bilateral coordination, dexterity coordination, tactile experience*

Roll with fingertips (one or two handed). Use for pinching, pulling, and poking. Hide and find objects (gems, beads, pennies, etc.) in putty. Stretch and form shapes.

Caution: putty will stain fabrics!!!