







Development of Gross Motor Skills in Early Childhood

37-48 months	49-60 months	61-70 months
Throw ball underhanded (4') Pedals tricycle 10 feet Catches large ball Completes forward somersault (aided) Jumps to floor from 12 inches Hops three hops with both feet Steps on footprint pattern Catches bounced ball	Bounces and catches ball Runs 10 feet and stops Pushes/pulls a wagon/doll buggy Kicks 10-inch ball toward target Carries 12-pound object Catches ball Bounces ball under control Hops on one foot for four hops	Throws ball (44', boys; 25', girls) Carries a 16-pound object Kicks rolling ball Skips alternating feet Roller-skates Skips rope Rolls ball to hit object Rides two-wheel bike with training wheels

Note: The skills are listed in the approximate order of difficulty within each age period.

Development of Fine Motor Skills in Early Childhood

37-48 months Approximates circle Cuts paper Pastes using pointer finger Builds three-block bridge Builds eight-block tower Draws 0 and + Dresses and undresses doll Pours from pitcher without spilling
49-60 months Strings and laces shoelace Cuts following line Strings ten beads Copies figure X Opens and places clothespins (one-handed) Builds a five-block bridge Pours from various containers Prints first name
61-72 months Folds paper into halves and quarters Traces around hand Draws rectangle, circle, square, and triangle Cuts interior piece from paper Uses crayons appropriately Makes clay object with two small parts Reproduces letters Copies two short words <small>Note: The skills are listed in the approximate order of difficulty within each age period.</small>

Brain Development

- Rapid development of the brain
 - Decelerates during early childhood
 - Filling in of existing structure, growth
- Lateralization

Motor cortex
Broca's area Primary auditory area Wernicke's area

Piaget's preoperational stage

- Features of preoperational thought
 - Representation
 - Deferred imitation
 - Symbolic play
 - Drawing
 - Mental images
 - Language

What does the doll see?

Limitations of preoperational thought

- Egocentrism
- Limitations of classification
- Lack of conservation
 - Centration
 - Irreversibility
