









# Some Cognitive Attainments of Infancy

## M I L E S T O N E S

Age	Typical Adaptive Behaviors	Physical Reasoning	Imitation	Categorization
Birth–1 month	<ul style="list-style-type: none"> <li>■ Newborn reflexes</li> <li>■ Exploration using limited motor skills, such as head turning and sucking</li> </ul>	<ul style="list-style-type: none"> <li>■ Size and shape constancy (see Chapter 4)</li> </ul>	<ul style="list-style-type: none"> <li>■ Imitation of adult facial expressions and gestures (see Chapter 4)</li> </ul>	
1–4 months	<ul style="list-style-type: none"> <li>■ Exploration using more advanced motor skills, such as kicking, reaching, and grasping</li> <li>■ Limited anticipation of events</li> </ul> 	<ul style="list-style-type: none"> <li>■ Awareness of object permanence</li> <li>■ Awareness of object solidity and certain effects of gravity and object collision (physical causality)</li> <li>■ Use of motion and spatial layout to identify objects as separate units (see Chapter 4)</li> </ul>	<ul style="list-style-type: none"> <li>■ Deferred imitation of adult facial expressions</li> </ul> 	<ul style="list-style-type: none"> <li>■ Categorization of perceptually similar stimuli</li> </ul>
4–8 months	<ul style="list-style-type: none"> <li>■ Exploration using improved reaching and grasping, swiping, banging, and throwing</li> </ul>	<ul style="list-style-type: none"> <li>■ Improved understanding of the effects of gravity and object collision (physical causality)</li> <li>■ Use of shape, texture, and color to identify objects as separate units (see Chapter 4)</li> </ul>	<ul style="list-style-type: none"> <li>■ Deferred imitation of adults' actions on objects over a short time interval (24 hours), but limited to behaviors the infant has observed many times</li> </ul>	<ul style="list-style-type: none"> <li>■ Beginning categorization of objects by function and behavior</li> </ul> 
8–12 months	<ul style="list-style-type: none"> <li>■ Intentional, or goal-directed, behavior</li> <li>■ Improved anticipation of events</li> <li>■ Means-end problem solving by analogy to other similar problems</li> </ul>	<ul style="list-style-type: none"> <li>■ Ability to retrieve an object from the first location in which it is hidden</li> <li>■ Understanding of more complex object collision conditions</li> </ul> 	<ul style="list-style-type: none"> <li>■ Imitation of behaviors slightly different from ones the infant usually performs</li> <li>■ Deferred imitation of adults' actions on objects over a short time interval (24 hours), after observing behaviors only a few times</li> </ul>	<ul style="list-style-type: none"> <li>■ Categorization of many objects by function and behavior</li> <li>■ Categorization of social stimuli (for example, emotional expressions, human versus nonhuman movement patterns)</li> </ul>
12–18 months	<ul style="list-style-type: none"> <li>■ Exploration of objects by acting on them in novel ways</li> <li>■ Flexible solutions to sensorimotor problems</li> </ul>	<ul style="list-style-type: none"> <li>■ Ability to search in several locations for a hidden object (AB search)</li> </ul> 	<ul style="list-style-type: none"> <li>■ Imitation of adults' and peers' novel behaviors</li> <li>■ Deferred imitation of behaviors over longer time intervals</li> <li>■ Deferred imitation across a change in context (for example, from child care to home and to similar objects)</li> </ul>	<ul style="list-style-type: none"> <li>■ Active object sorting: touching objects that go together followed by grouping objects into a single category</li> </ul> 
18 months–2 years	<ul style="list-style-type: none"> <li>■ Sudden solutions to sensorimotor problems, suggesting mental representation</li> <li>■ Beginnings of make-believe play</li> </ul>	<ul style="list-style-type: none"> <li>■ Ability to find an object that has been moved while out of sight</li> </ul> 	<ul style="list-style-type: none"> <li>■ Imitation of actions an adult tries to produce, even if these are not fully realized</li> <li>■ Imitation of entire social roles in make-believe play</li> </ul>	<ul style="list-style-type: none"> <li>■ Active object sorting: grouping objects into two categories</li> </ul>

*Note.* These milestones represent overall age trends. Individual differences exist in the precise age at which each milestone is attained.