

# Some Cognitive Attainments of Childhood and Adolescence

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

Age	Cognitive Attainment
<b>Early Childhood</b> 2–4 years	<ul style="list-style-type: none"><li>■ Dramatic expansion of representational activity, as indicated by language, make-believe play, drawings, and understanding of spatial symbols (photographs, simple maps, and models)</li><li>■ Takes the perspective of others in simplified, familiar situations and in everyday communication</li><li>■ Distinguishes animate beings from inanimate objects; denies that magic can alter everyday experiences</li><li>■ Constructs many more categories on the basis of common function and behavior; readily draws inferences about nonobvious characteristics that category members share</li><li>■ Differentiates global categories into superordinate, basic-level, and subordinate categories</li></ul>
4–7 years	<ul style="list-style-type: none"><li>■ Displays complex sociodramatic play and creates more realistic drawings, which begin to depict the third dimension</li><li>■ Replaces magical beliefs about fairies, goblins, and events that violate expectations with plausible explanations</li><li>■ Notices transformations, thinks reversibly, and explains events causally in familiar situations</li><li>■ Shows improved ability to distinguish appearance from reality</li></ul>
<b>Middle Childhood</b> 7–11 years	<ul style="list-style-type: none"><li>■ Thinks in a more organized, logical fashion about concrete, tangible information, as indicated by the ability to pass Piagetian conservation, class inclusion, and seriation problems, including transitive inference</li><li>■ Shows improved understanding of spatial concepts, as indicated by conservation of distance, ability to give clear directions, and well-organized cognitive maps</li><li>■ Displays the horizontal décalage—sequential mastery of logical reasoning in different content areas</li></ul>
<b>Adolescence</b> 11–20 years	<ul style="list-style-type: none"><li>■ Reasons abstractly in situations that offer many opportunities for hypothetico-deductive reasoning and propositional thought</li><li>■ Displays the imaginary audience and personal fable, which are strongest in early adolescence and gradually decline</li></ul>

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