

# Early Adolescence (12–14 years)



## Cognitive development

What is happening?	How can I tell?	How can I help?
<b>BRAIN-BASED DEVELOPMENT</b>		
<b>The brain functions more efficiently</b>	Can learn and grasp new concepts and interpret complex information	<ul style="list-style-type: none"> <li>Youth learn through experience. Activities that engage the senses (for example, field trips, games or role-playing) are enjoyable and are also powerful learning tools</li> <li>Support participation in activities that require thinking about multiple things at the same time (for example, learning to juggle, playing a musical instrument or throwing a ball with your non-dominant hand)</li> <li>Introduce challenges that require complex thinking skills (such as building a model bridge structure out of miscellaneous items, including youth in organizing events)</li> <li>Encourage sports and exercise activities to help improve memory and attention skills</li> <li>Encourage continued practice in a range of activities that take advantage of and reinforce the ability to learn new information more quickly and accurately</li> </ul>
<b>The brain's processing speed increases</b>	Can learn new information more quickly	
<b>Distinctions about risks and rewards begin to emerge</b>	<p>Eager to try a range of new activities</p> <p>May engage in behaviours that are potentially dangerous or harmful (such as staying out past curfew) with seemingly little regard for potential consequences</p> <p>May be drawn to thrill-seeking and risk-taking activities (for example, cliff jumping, roller coasters)</p> <p>May begin to improve ability to assess risk versus reward</p> <p>Becoming more sensitive to pleasure and rewards such as:</p> <ul style="list-style-type: none"> <li>having fun with friends</li> <li>getting paid to do chores</li> </ul>	<ul style="list-style-type: none"> <li>Encourage youth to take safe risks by providing opportunities to participate in supervised activities that are also thrilling (for example, skateboarding)</li> <li>Help identify potential consequences of risky behaviour by asking questions like: "What do you think could go right?"; "What could go wrong?" or "How could this affect your future?"</li> <li>Provide or connect youth to sources of information (for example, family physician, online resources, someone with related experience)</li> <li>Provide supervision, advice, tools and information to encourage safety and preparedness (such as protective equipment, a cell phone, or a map)</li> <li>Lead by example—youth at this stage look up to older youth and adults—and model sound decision making (for example, by wearing a bike helmet or dealing rationally with conflicts)</li> <li>Provide support in a "non-judgemental" way when dealing with the consequences of risky or harmful decisions</li> <li>When helping a young adolescent make decisions, emphasize the rewarding aspects and positive alternatives rather than the potential consequences</li> </ul>
<b>The ability to control impulses and regulate behaviour is not fully developed</b>	May have a tendency to seek immediate gratification—impulse control abilities are not fully developed	<ul style="list-style-type: none"> <li>If youth engage in "negative" behaviour (for example, submitting a late assignment) have them describe their thought process leading up to, and following, the behaviour in question (for example, "You always hand in your assignments in on time. What was different about this time?"; or "What would you do differently next time?")</li> <li>Be patient, compassionate and acknowledge sources of stress that may be impacting a young person's emotions and behaviour (for example, struggling with grades, a recent argument with a friend)</li> </ul>
<b>DEVELOPMENT OF REASONING SKILLS</b>		
<b>Capacity for abstract thought increases</b>	<p>Can generalize abstract rules from concrete examples (for example, learns that practice can be beneficial to improve performance at sports and can also be applied to activities outside of sports)</p> <p>Can consider what might happen in hypothetical as well as in real life situations (for example, can describe what might happen if all the snow in the world melted)</p> <p>Can formulate and test hypotheses in order to draw conclusions (for example, "I'm going to try a new route to school because I think that it will get me there faster")</p> <p>Can suspend beliefs about the real world to consider the structure of an argument</p>	<ul style="list-style-type: none"> <li>Encourage activities that allow youth to organize abstract ideas and draw reasoned conclusions (for example, developing a "pros and cons" list)</li> <li>When an adolescent is learning a new concept, have them describe their thought process out loud. Probe their depth of understanding by: <ul style="list-style-type: none"> <li>Suggesting alternative explanations ("But have you thought about...?")</li> <li>Posing alternative perspectives ("Would you think the same way if you were...?")</li> <li>Asking youth to generate analogies, comparisons and connections ("Do you think that's similar to...?")</li> </ul> </li> <li>Create opportunities for debate and have debaters argue for positions that they may not personally support (for example, the benefits of shortening the summer holidays)</li> <li>Present riddles and logic puzzles</li> <li>Promote perspective-taking (for example, introduce diverse perspectives, concepts, and lifestyles through movies, books, biographies, case studies and music)</li> </ul>
<b>Logical thinking skills expand</b>	Can understand logical principles and begin to engage in logical thinking (for example, developing strategies when playing a game that considers how other players might respond to their moves)	
<b>Working memory improves</b>	Can hold multiple dimensions of a problem in mind at one time (for example, can think about the horizontal effects: if I do 'X' it will impact 'Y' which will impact 'Z')	<ul style="list-style-type: none"> <li>Reflect with a young person about the day's events and lessons learned</li> <li>Provide youth with different perspectives on how the facts can be interpreted, and explain in relatable terms why those perspectives are valid</li> </ul>
<b>Beliefs about knowledge and "facts" become more sophisticated</b>	<p>Notices that individuals exposed to the same facts can draw different conclusions, calling into question the absolute nature of "facts"</p> <p>Begins to understand that the "right answer" sometimes depends on a variety of factors</p>	