

**Middle Childhood Cognitive Development:
The Concrete Operational Stage + Information Processing Gains**

decentration	reversibility	classification	cognitive self-regulation
spatial reasoning	inhibition	rehearsal	seriation
elaboration	cognitive map	theory of mind	meta-cognition

Use the terms in the box above to fill in the blanks below.



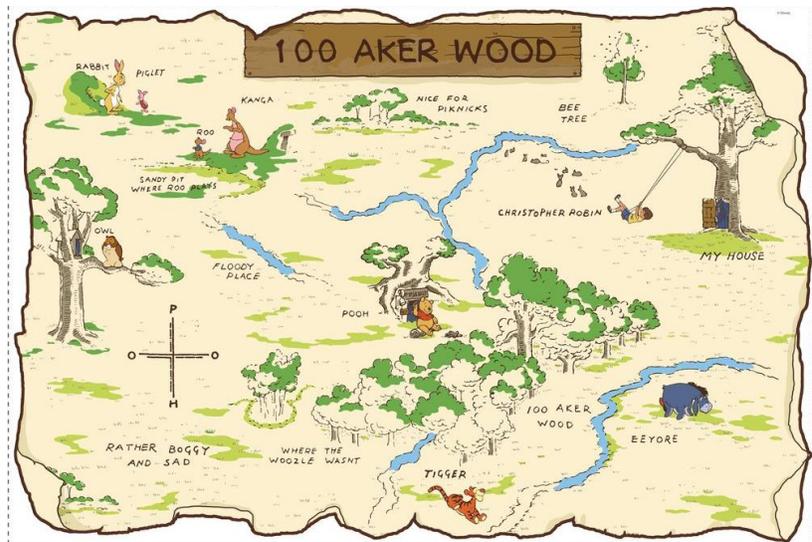
Christopher Robin is an eight-year-old boy who spends a great deal of time in Hundred Acre Wood with his friends Winnie-the-Pooh, Eeyore, Kanga, Roo, Rabbit, Piglet, Owl, and Tigger.



One day, while playing with his friend Eeyore, Christopher Robin noticed that a butterfly had landed on Eeyore's head. Christopher Robin became excited and considered this to be a delightful turn of events. "Eeyore! There is a beautiful butterfly on your head! Let me catch it!" He exclaimed. However, his friend Eeyore was rather morose and just said, "Thanks for noticing... I can feel it, but I can't see it, and I don't want to move my head. It's probably just a rotten, ugly leaf that landed on my head. Just let it sit there and rot my hair with it." Christopher Robin was surprised by this response, but he was able to understand that Eeyore had different emotions, beliefs, intentions, and knowledge than he himself did. This demonstrates that Christopher Robin has _____.

Given the difference between his response to the butterfly and Eeyore's, Christopher Robin had a moment of quiet reflection. He started thinking about his own thinking. "How did I learn what a butterfly is, anyway? Where did I gain this knowledge? I really feel like I have a strength in remembering the names of different insects... apparently, I'm not so great at sharing that knowledge with my friends, though, since Eeyore barely understands what a butterfly is." This moment of reflection most clearly demonstrates _____ on the part of Christopher Robin. He also greatly enjoys identifying how the various types of crawling and flying creatures in Hundred Acre Woods fall into categories and subcategories like mammals, insects, bugs, etc. which demonstrates his skill in _____.

After playing with Eeyore, Christopher Robin decides to make his way through Hundred Acre Woods to find Kanga's house. He looks at a map of the woods as he navigates his way there, which clearly evidences some of the gains he is making in



_____ during middle childhood. He never would have been able to look at a map and make sense of it like that a few years ago. Sometimes, Christopher Robin is even able to close his eyes and visualize the Hundred Acre Woods in his mind, which also helps him find his way by using this _____ in his memory.

Although he really wants to visit his friend Winnie-the-Pooh on the way to Kanga's house, he tells himself, "Stay focused on your goal and don't get distracted. You want to go to Kanga's house, so don't turn toward Winnie-the-Pooh's instead." He is exercising

_____ in how he is redirecting himself away from the distraction of Pooh's house in order to focus on reaching Kanga's instead. Christopher Robin uses _____ to help him along his route, since he keeps repeating to himself, "Through the woods, then turn right. Owl's Place on your left, The Floody Place on your right." At one point, Christopher Robin realizes he is lost because he arrives at the Rather Boggy and Sad Place. He looks back at the map, asks himself, "How is my progress so far? Well, I've come quite a distance but have some more to go. Am I still headed toward Kanga's? No, I need to turn a bit and redirect my steps toward her house. Maybe I need to rotate the map in my hands to solve this problem." He feels confused and frustrated, and starts hitting the map. In evaluating his progress and redirecting his efforts, Christopher Robin shows how he is trying to develop the mental skill of _____ to self-monitor and steer his course.

After much persistence and dogged determination, Christopher Robin arrives at Kanga's house. He feels proud of himself for braving the woods, staying focused, and arriving at his chosen destination. Christopher Robin discovers a pleasant surprise—many of his friends are at Kanga's house, too, including Roo, Rabbit, Piglet, and Owl. He notices that there is a considerable difference in height between all of these friends, which he finds quite funny. He tells his friends to stand in a certain order and starts arranging them in a line by height, from shortest to tallest (he himself being the tallest). His ability to establish this height order demonstrates the cognitive skill of _____.

Rabbit also wants to entertain the friends. He puts two tall drinking glasses of the same height and width on a table, then pours an equal amount of carrot juice into each of them. Then he takes one of those glasses and pours all of its carrot juice into a glass that is much shorter and wider. Christopher Robin chuckles and says aloud, "Oh, I've seen this trick before. There is the same amount of juice in both glasses. Don't be fooled by the different glass sizes, friends,

since that doesn't really matter." Clearly he has now developed _____ in middle childhood.

Today happens to be Roo's birthday, so the friends decide to bake a cake. Kanga asks Christopher Robin, Piglet, and Owl to go to Christopher Robin's house and fetch some ingredients for the cake: flour, sugar, butter, eggs, and vanilla. In order to remember this list of ingredients, Christopher Robin paints a mental image in his mind combining the ingredients. He pictures a white flower ("a vanilla flour") with multiple petals on it. One of the petals has sugar cubes on it, another petal has a stick of butter on it, and another petal is holding an egg. This memory strategy of _____ helps him to remember the ingredients to fetch. He and his friends head out the door of Kanga's house, looking at Christopher Robin's map to find their way back from whence he came. Since he can retrace the steps of his route in his mind, he can also use _____ to find his way back home.

THE END

