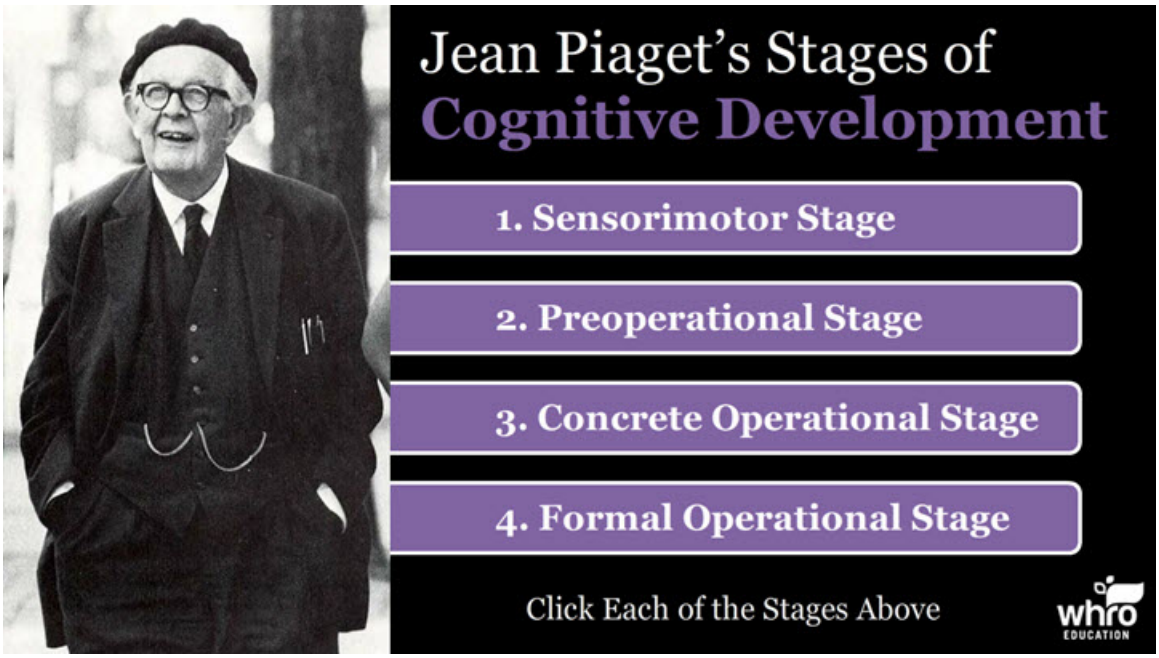
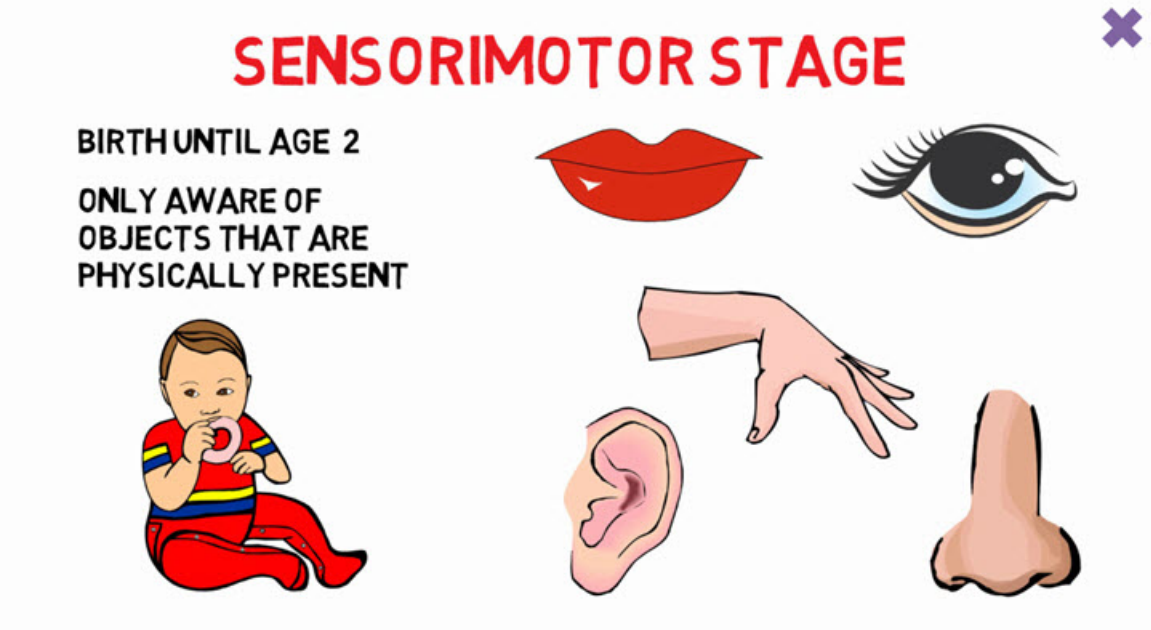
Module 5: Life Span Development
Topic 2 Content: Piaget's Stages of Cognitive Development

Introduction



Jean Piaget believed that cognitive development followed a series of stages. Specifically, Piaget's stages of cognitive development include the sensorimotor stage, preoperational stage, concrete operational stage, and formal operational stage.

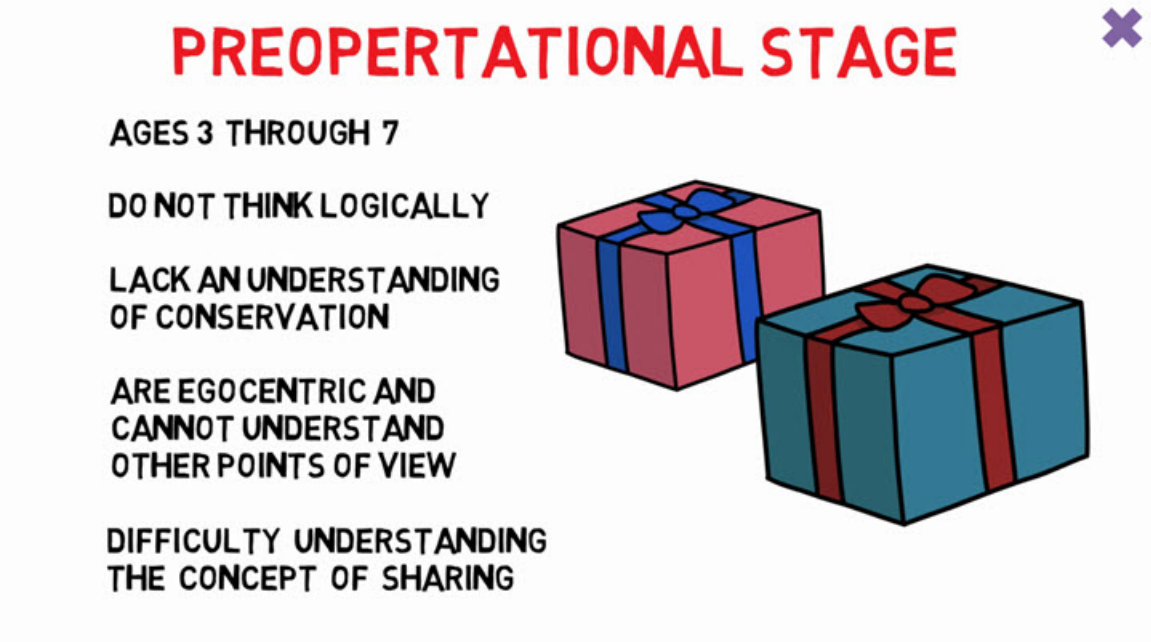
Sensorimotor Stage



According to Piaget, from birth to about age two, the child is like a big sponge that soaks in experiences and gathers information about the world from all five of the senses. This is called the sensorimotor stage of cognitive development. Have you ever seen an infant put something in his or her mouth? By putting an objects in their mouths, infants use taste to discover more about the object.

Early in the sensorimotor stage, infants are only aware of an object if it is physically present. This explains why infants love the game peek-a-boo. If you place a blanket over an object, they believe it is gone. When you suddenly pull the blanket off, they are amazed. An important concept that develops in this stage is object permanence. Try playing peek-a-boo with an eight-year-old, and you may feel disappointed that the child's reaction is not as much fun as when you played with an infant. By this age, the child realizes that an object is still there even when it is covered. However, Piaget believed that children have not graduated from this stage until they develop mental representations of an object. For example, if a two-year-old begins to ask for his or her "blankie" at nap time, it is good sign that the child might be moving out of the sensorimotor stage.

Preoperational Stage

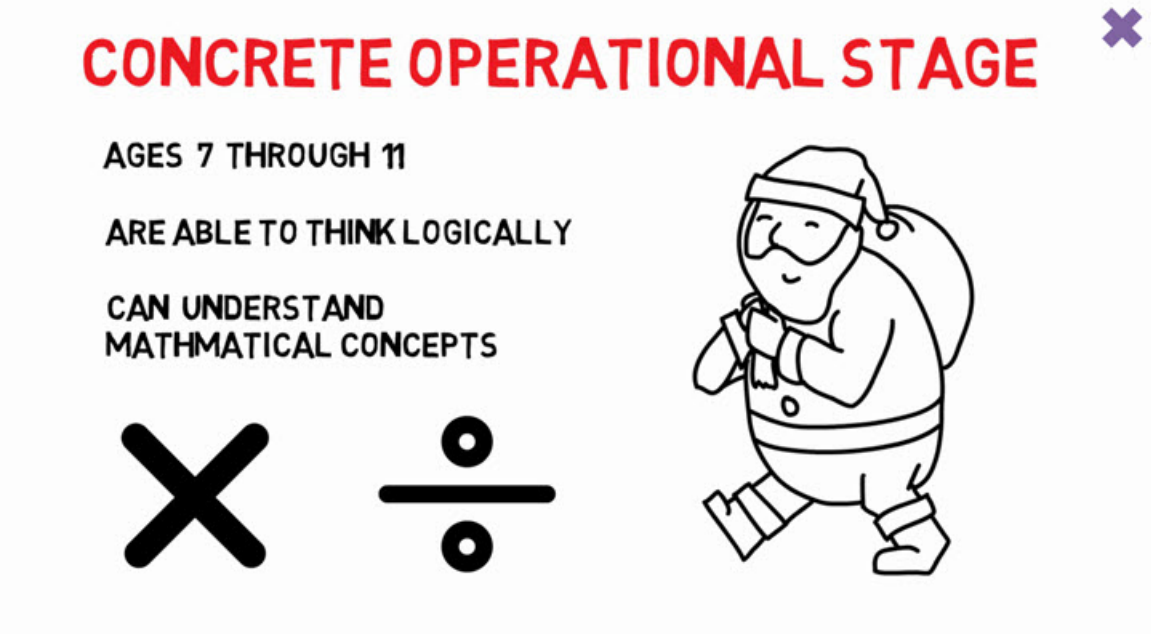


The preoperational stage spans from ages three to seven. Children in this stage do not think logically. As an example, imagine a situation where a babysitter gives four-year-old twin boys each a hotdog for lunch. She begins cutting both hotdogs for them when one suddenly yells "Hey, he's got more than me!"

Piaget would contend that in this example, the twins lacked an understanding of conservation. This is the principle that properties such as mass, volume, and number remain the same even if the object's form changes. Since they lack this cognitive skill, the twins were unable to understand that cutting the hotdog into different sized pieces still meant they received the same amount of food.

Try to remember when you were a child and went to one of your friends' birthday parties. While the birthday boy or girl got tons of gifts, you were lucky enough to leave with a party favor. Every child who attended the party would have had a meltdown if only the birthday child received gifts. Children in the preoperational stage are egocentric, meaning they can only see things from their own perspective and cannot understand someone else's point of view. This is why preschoolers have a tough time understanding the concept of sharing.

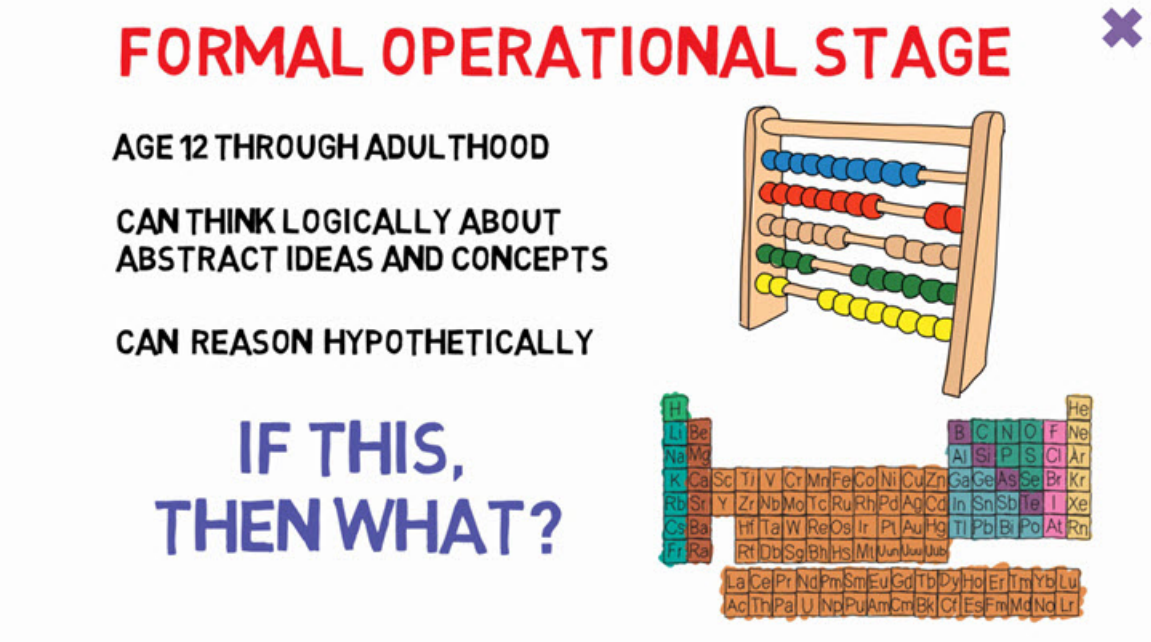
Concrete Operational Stage



How old were you when you or your friends began to question the idea of Santa Claus? Did you wonder how he was able to accomplish the task of delivering gifts to all the children in the world in one night? Or did you question why Santa looked different at every mall?

Children fall into the concrete operational stage between the ages of seven and eleven. At this point, Piaget believed children's minds make an important shift that allows them to start thinking logically. It is usually around this age that children stop believing in Santa. They also begin to understand mathematical concepts, such as multiplication and division.

Formal Operational Stage



Children reach the formal operational stage as early as age twelve, and remain in this stage into adulthood. At this time, children can think logically about abstract ideas and abstract concepts such as algebra, chemistry, and physics. Furthermore, once in the formal operational stage, children can reason hypothetically, as when they are given "If this, then what?" types of questions. Abstract reasoning and problem solving are the hallmarks of this final stage of cognitive development.