

## #11 Cognitive Development

---

Kids do not behave like adults - Some examples:

The child might be

- 1) incapable
- 2) uninformed
- 3) misguided

What is the Starting Point?

What is the Learning function?

Jean Piaget & Stage Theories

domain independent vs domain specific changes in thought

An aside: If there is a vowel on one side, THEN there is an **ODD** number on the other  
Wason selection task (Wason, 1966)

Piaget's stages

**Sensory-motor (up to about 2 years)**

**Pre-operational (pre-school years)**

Conservation  
Egocentrism  
Animism  
Hierarchy (set theory):  
Causality:

**Concrete Operational (starting around 5-7)**

**Formal operational (starting in adolescence)**

Taking apart the conservation example

Baby knows math

Wynn, K. (1992). Addition and subtraction by human infants. *Nature*, 358, 749-750.

Taking apart Animism – Baby knows biology

The work of Elizabeth Spelke – Baby knows physics

Do the little scientists just need more facts?

Diamond, A., & Taylor, C. (1996). Development of an aspect of executive control: development of the abilities to remember what I said and to "do as I say, not as I do". *Dev Psychobiol*, 29(4), 315-334.