



# Theory of Cognitive Development

## Piaget's 4 Stages of Intellectual Development

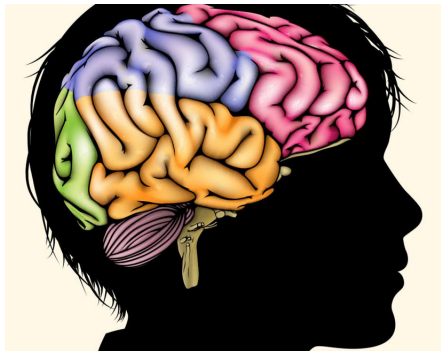
### Topic links:

*Intellectual Development*

*Infancy*

*Early Childhood*

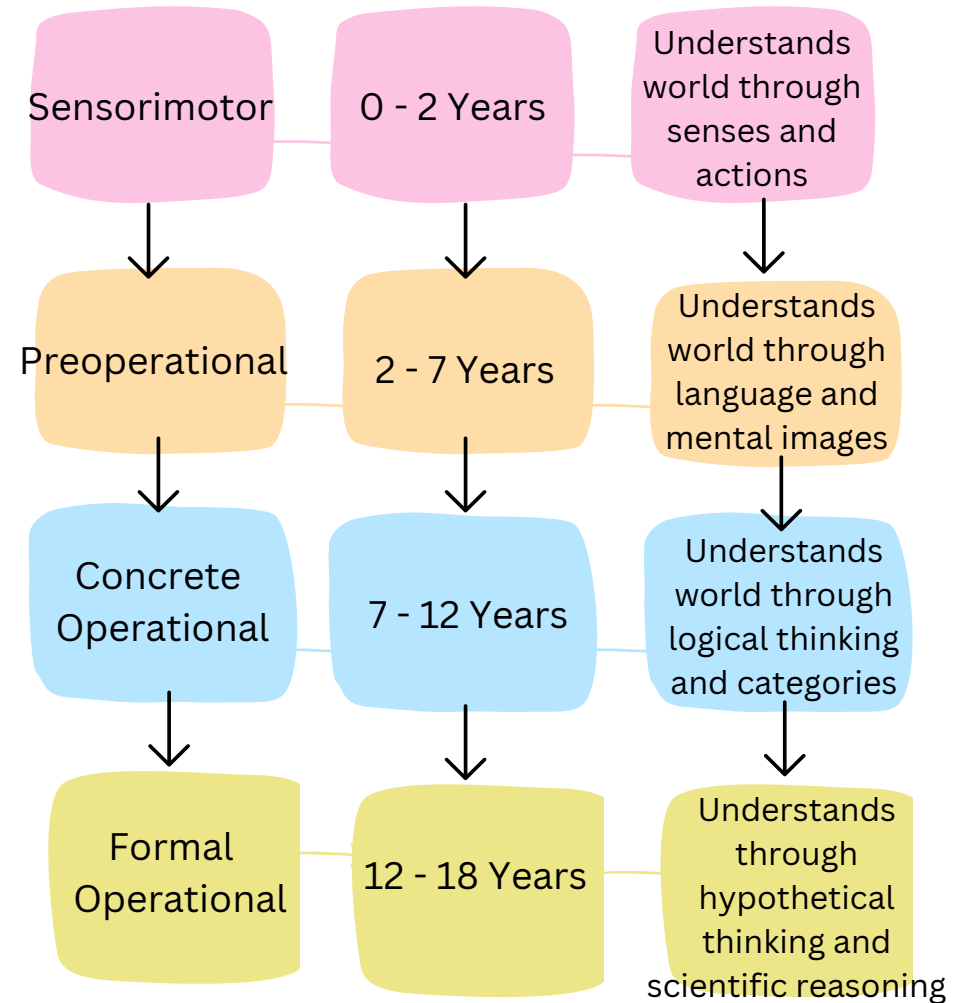
*Adolescence*



"Children think differently to adults. They learn through **play** and their environment and play should encourage further cognitive and language development"

**Ego Centrism** - the child's inability to see a situation from another person's point of view. Piaget believed that all children think this way until the age of 7.

**Schema** - a pattern of learning, linking perceptions, ideas and actions to make sense of the world, Piaget described it simply as a way of organising knowledge.



Jean Piaget

1894 - 1980



# Theory of Cognitive Development

## Strengths & Weaknesses

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*Intellectual Development*

*Infancy*

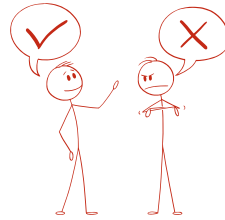
*Early Childhood*

*Adolescence*

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### Strengths

- Understanding that **learning changes** over the course of a lifetime.
- The theory brings order to the idea of learning and **allows teachers** to create **learning environments** to suit the **age group** that they teach.
- Helps professionals to **identify** where there may be a **developmental delay** if a child is not progressing through Piaget's stages of intellectual development



### Weaknesses

- The theory was based on a study of just a small number of children.
- Children may develop at different stages for various reasons.
- Some children may be able to see things from other perspectives before the age of 7.

# Schemas

Example



**Schemas = categories of knowledge that help us to understand the world**

**A schema includes both a category of knowledge and the process of obtaining that knowledge**

**Through experience in the world, a child will take in this new information, changing the already existing schema to include these new observations**

For example, a child may have a schema about a type of animal such as a dog. If the child has only had an experience with small dogs then they may believe that all dogs are small. If they then have an experience with a larger dog, they will take in this information and add it to their schema.

**This explains why Piaget believed in giving children a wide range of experiences, to grow their knowledge.**

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## **Equilibrium**

a state of cognitive balance where a child's experience is in line with their understanding

## **Disequilibrium**

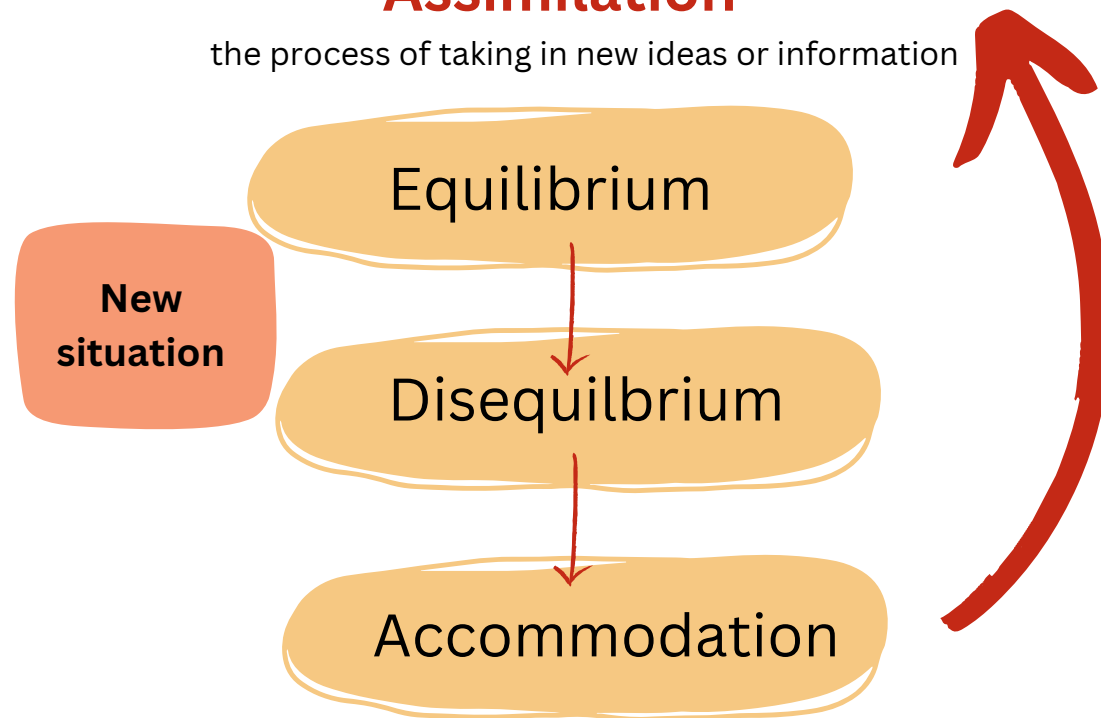
A state of cognitive imbalance between experience and what is understood

## **Accommodation**

Modifying schemas in relation to new information and experiences

## **Assimilation -**

the process of taking in new ideas or information



Jean Piaget

1894 - 1980



# Stages of Play

Piaget highlighted the importance of *play* for learning and development. He believed that children pass through these stages of play:

## Topic links:

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*Adolescence*

## Solo Play (0-1 Year)

Looks at adults closely, puts things into mouth and touches things with hands. Plays alone with toys. Gradually begins to play simple games, for example "Peekaboo" and begins to explore toys alone.

## Solo Play (12-18 Months)

Begins to play and talk alone., repeats actions and starts to play with adults, notices other children.

## Parallel Play (18 Months-2 Years)

Begins to enjoy repetitive actions, such as putting objects into and taking them out of boxes. Begins to copy other children and adults. Enjoys playing with adults and on own. Learns through trial and error.

## Associate Play (2-3 Years)

Begins to play cooperatively with other children and starts to show reasoning skills by asking "how" or "why" questions. Join in role play games.

## Cooperative Play (4-6 Years)

Begins to use simple rules in games. Plays cooperatively towards a shared goal and takes turns when playing games with other children.

## Cooperative Play (6-8 Years)

Begins to enjoy playing in small groups, making up games and rules. Enjoys understanding and using rules but can struggle with losing.

Jean Piaget

1894 - 1980

What is solo play?

- Solo play = independent play
- Solo play begins in infancy and is common at this life stage because infants have limited social, cognitive and physical skills
- Solo play gives children the chance to explore at their own pace
- Solo play can help infants focus their attention, become self-reliant, learn through mistakes and develop self esteem



# Piaget

## Questions

**1. Piaget's work relates to:**

- a) Personality Development
- b) Physical Development
- c) Cognitive Development
- d) Moral Development

**2. According to Piaget, Egocentrism ends around the age of:**

- a) 7
- b) 2
- c) 10
- d) 5

**3. Piaget's third stage of Development**

is:

- a) Sensorimotor
- b) Formal Operational
- c) Concrete Operational
- d) Preoperational

**4. "Children are capable of abstract reasoning"**

is a description of which stage of Piaget's theory?

- a) Formal Operational
- b) Preoperational
- c) Sensorimotor
- d) Concrete Operational

**5. Using role play and plasticine apply to which of Piaget's stages?**

- a) Preoperational
- b) Formal Operational
- c) Concrete Operational
- d) Sensorimotor

**6. One weakness of Piaget's theory is:**

- a) There is no research evidence
- b) It is old-fashioned
- c) It is based on a limited sample of children
- d) There are no applications to real life

**7. A key characteristic of the Sensorimotor stage is:**

- a) Egocentrism
- b) Object permanence
- c) Lack of conservation
- d) Logical Reasoning

**8. A weakness of Piaget's stages of development is:**

- a) There are no applications in the real world
- b) There is no research evidence to support the 4 stages
- c) It underestimates cognitive abilities of older children
- d) It underestimates cognitive abilities of younger children

**9. Based on Piaget's theory, the role of a teacher in education should be to:**

- a) Help children discover things for themselves
- b) Train children to repeat what they say
- c) Tell children everything they need to know
- d) Treat every child the same way

**10. Children in the Preoperational stage should be encouraged to:**

- a) dress up to overcome egocentrism
- b) Solve problems they are set
- c) Play with toys that make loud noises
- d) Play with toys that have bright colours



# Piaget

## Answers

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