

3.4 Cognitive Development Across the Lifespan

Name: _____ Class: _____ Date: _____

Total: 18 marks

KEY WORDS assimilation 同化 • egocentrism 自我中心 • piaget 皮亚杰
• zone of proximal development 最近发展区 • accommodation 顺应

Objective

Build the skills to answer exam questions on **cognitive development** 认知发展.

You must be able to:

- describe **assimilation** 同化 and **accommodation** 顺应
- name the stages of the Piagetian sequence and one achievement of each
- explain **scaffolding** 支架 and the **zone of proximal development** 最近发展区
- state what later research revised about stage accounts

1 Worked examples

Study these first. Each one shows the method for a task used later.

■ Two processes

A **schema** is a mental framework. **Assimilation** fits new information into an existing schema; **accommodation** changes the schema to fit information that will not fit.

■ The stage sequence

Sensorimotor: knowing through action; achieving **object permanence**. **Preoperational**: symbolic thought, but **egocentrism** and failure of conservation. **Concrete operational**: logical operations on concrete material, including **conservation**. **Formal operational**: abstract and hypothetical reasoning.

■ Scaffolding

A more capable partner supports a learner through what they cannot yet do alone — the **zone of proximal development** — and withdraws support as competence grows. Development here is social before it is individual.

■ What was revised

Later work found children often competent earlier than the stage account predicted, and development less uniformly staged: performance depends heavily on how the task is presented.

2 Practice

2.1 State the difference between assimilation and accommodation. [2]

2.2 Explain what the zone of proximal development describes. [2]

2.3 A child says the taller glass holds more water although both were poured from identical glasses.

(a) Name the ability not yet acquired. [1]

(b) State the stage this indicates. [1]

3 Exam-style questions

3.1 Knowing that a hidden object still exists is [1]

A	B
C	D

A conservation

B object permanence

C egocentrism

D accommodation

3.2 Later research revised stage accounts mainly by showing that children [1]

A	B
C	D

A develop more slowly than described

B often show competence earlier when tasks are simplified

C never reach formal operations

D do not use schemas

3.3 A teacher gives hints that gradually decrease as a pupil masters a task.

- (a) Name the technique. [1]
- (b) Explain why withdrawing support is part of the method. [2]

3.4 Applied research task. A child is shown two identical glasses of juice, filled to the same level, and agrees they hold the same. The juice from one is then poured into a tall narrow glass while she watches. She now says the tall glass has more. A second, older child watching says the amount cannot have changed because nothing was added or taken away.

- (a) Name the Piagetian stage each child is in, and the concept the younger child has not yet acquired. [3]

- (b) Explain the older child's reasoning in terms of reversibility. [1]

- (c) Explain what egocentrism means in Piaget's theory, and give an example that is not the juice task. [2]

- (d) Vygotsky would explain the older child's success differently. Explain his account using the zone of proximal development and scaffolding. [1]
