3 Development: what changes with age and what does not – Part 2

Name: _____ Class: _____ Date: _____

Vocabulary

Write each word three times.

English	**Write it 3 times** (English)		
object permanence			
conservation			
Attachment			
heritability			

Recall

- You know a young child cannot understand a joke that an older one finds funny.
- You have seen a baby become upset when a parent leaves the room.
- You know that identical twins raised apart still resemble each other in some ways.

New ideas

Read these first. Each idea has a short worked example. Then do the Practice below.

■ 1 Stages of thinking

Piaget argued that children's thinking changes in kind, not only in amount. A child develops **object permanence** - knowing a thing still exists when hidden - and later **conservation** - knowing that quantity does not change when the shape does.

Worked example. Pouring the same juice into a tall thin glass makes a young child say there is more; an older child says it is the same.

2 Attachment

Attachment is the emotional bond between infant and caregiver. Its pattern is measured by how the infant responds to separation and reunion, not by how upset they get on its own.

Worked example. Two infants both cry when the parent leaves; the difference that matters is whether they are comforted when the parent returns.

3 Nature and nurture together

Almost every trait reflects both inheritance and environment. Twin and adoption studies estimate **heritability** - how much of the *variation in a population* is explained by genetic differences. It is a statement about a group, never about one person.

Worked example. A heritability of 0.5 for a trait does not mean half of your own score came from your genes.

Watch out: Heritability is a population statistic. Applying it to an individual - "half of his intelligence is genetic" - is a misuse of the number, not a simplification of it.

Practice

2.1 Define object permanence. [1]

2.2 Define conservation and give an example. [2]

2.3 State what the pattern of attachment is measured by. [2]

2.4 Two infants cry equally when a parent leaves. State what distinguishes their attachment patterns. [2]

2.5 Define heritability. [2]

2.6 Explain why a heritability estimate cannot be applied to one person. [2]