Development 1

1. Why is Piaget such an important figure given all the errors that have now been revealed in the theories that he proposed?
2. Egocentrism and perseveration of action are both characteristic behaviors of children in Piaget's preoperational stage. Describe an example that illustrates each of these behaviors. What are some practical and theoretical implications of these behaviors?
3. What might it mean for a child to understand numbers?
4. Describe the *analog* and the *knower-levels* accounts of how children acquire understanding of numbers. What results can distinguish these two hypotheses?
5. What is an *analog-magnitude representation*? What evidence suggests that this capability is shared by adults, monkeys, and infants?

Development 2

6. What is *socialization* research? How does it differ from, for example, the approach taken by Piaget?
7. Summarize the critical procedural differences between experimental and correlational research.
8. Why does socialization research typically not involve *experiments*?
9. What is the important difference between correlation (association) and causation?
10. Outline the logic and advantages of twin studies in socialization research.
11. What are two problems interpreting correlations as evidence for causation? How do these problems apply specifically in socialization research?

Development 3

12. Why does it matter that most research on parenting style is correlational?
13. What are birth-order effects? Summarize evidence for and against their existence.
14. Comment on the statement: "children learn how to act by imitating their parents."
15. What evidence supports the idea that the *personality* of an individual may be different in different contexts? How does this idea help us understand why so many people believe in birth-order effects?
16. How do the context dependence of behavior and the desire of humans to fit into a group help us to make sense of the language learned by children when they are raised in a society that speaks a language different from that of their parents? What other phenomena do these ideas help explain?

Development 4

17. The genetic code is often said to be like a blueprint. What suggests this analogy? Why is it flawed?
18. How can genetic instructions flexibly specify structures and behaviors?
19. How can the human genome, with roughly 30,000 genes, provide the specifications that lead to the development the brain, with billions of neurons, as well as the body with all of its complexity?
20. What is neuroplasticity?
21. Explain how brain changes associated with skill learning might be related to the concept of neuroplasticity.

22. What is the global-local task? What do brain damaged patients tell us about how hemispheric asymmetries affect this task? What do children recovering from perinatal brain damage tell us about the nature of the hemispheric asymmetry for this task?
23. Given that, in most of the brain, new neurons are not normally created after birth, how can neuroplasticity be possible?
24. Strokes often cause brain damage. Comment on the belief that most recovery after a stroke will occur within 3 or 4 months. What factors influence recovery from strokes in adults?