

Online Test Bank

to accompany

*Exploring
Science and
Mathematics in a Child's World*

Prepared by

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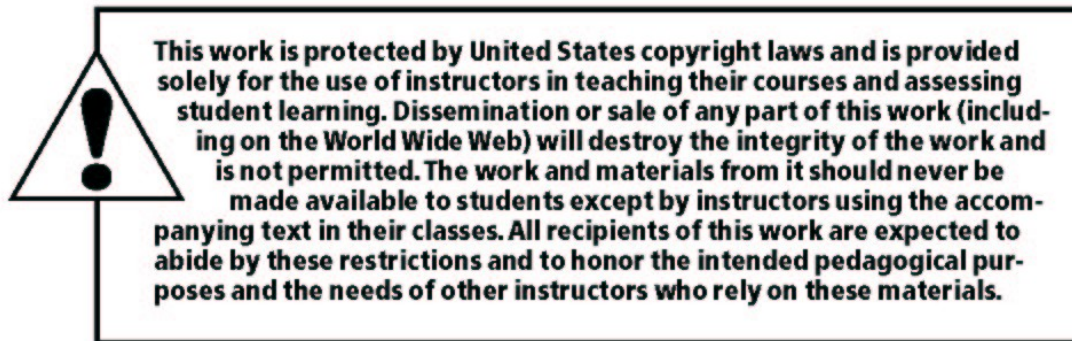
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Note to Instructor:

The Online Test Bank includes test items for Chapters 1 – 6 only. Chapters 7 – 18 of the text refer to specific science/math concept explorations and are not applicable for test items.

CHAPTER 1

A Child's World- *How Young Children Learn*

Multiple Choice

Choose the best answer for each of the following questions.

1. Which statement captures best the developmental view of infants?
 - (a) They are blank slates when they are born.
 - (b) They begin their lives with the ability to take in and process perceptual information.
 - (c) They respond only to loud sounds in their environment.
 - (d) They need to be physically active to acquire new information.
2. *Cause and effect* is part of a child's early experiences. Which statement best represents its meaning?
 - (a) It refers to relationships between actions and outcomes.
 - (b) It only refers to concrete, physical reactions of objects.
 - (c) It refers to relationships that only children above the age of three can understand.
 - (d) It is only used in contests for scientific experimentation.
3. The perception of sound is an important part of early learning. Which is a true statement about the perception of sound?
 - (a) It begins at about the age of six months.
 - (b) It begins before birth.
 - (c) It is not able to be assessed in infants.
 - (d) It develops more quickly in male infants than in female infants.
4. What is true about the development of speech and language in young children?
 - (a) Speech occurs only with formal instruction.
 - (b) Speech becomes most evident between the ages of two and six years of age.
 - (c) Speech develops simultaneously with learning to read.
 - (d) Speech is the most important evidence of a child's intellectual development.
5. The *combinatorial property* of language has been defined. Which is the correct definition of this property?
 - (a) It refers to how compound words are formed.
 - (b) It means how things or words combine to produce new meaning.
 - (c) It explains how vowels are combined with consonants to produce words.
 - (d) It defines how sentences are constructed with verbs and nouns.
6. The *productive property* of language has also been defined. Which is the correct definition of this property?
 - (a) It explains how combinations of letters group together to form sounds.
 - (b) It defines how root words can be changed to produce different forms of the word.

- (c) It explains how language can cause or bring about action.
 - (d) It explains how words can produce feelings and emotions.
7. Children learn to talk in their early years. Which statement best captures this accomplishment?
- (a) Learning to talk only occurs with formal instruction.
 - (b) Learning to talk occurs without formal instruction.
 - (c) Learning to talk occurs only after they learn the alphabet.
 - (d) Learning to talk usually happens after the age of three.
8. *Patterns* are an essential part of logical development in the young child. Which statement best captures this concept?
- (a) Patterns cannot be understood by children before age three.
 - (b) Patterns refer only to numerical information such as the multiplication tables.
 - (c) Patterns are logical foundations of mathematics and science.
 - (d) Patterns are understood after the acquisition of language.
9. *Seriation* is an important concept acquired by young children. Which statement best defines seriation?
- (a) Seriation is ordering that is only numeric.
 - (b) Seriation refers to grouping or sorting items according to one attribute.
 - (c) Seriation means ordering things along a continuum, according to an attribute.
 - (d) Seriation is simply putting things in categories or groups based only upon measurable attributes such as time, weight, length and number.
10. *One-to-one correspondence* is a concept best describes by which statement?
- (a) It is essential for rational counting.
 - (b) It refers only to rote counting.
 - (c) It is mastered by most children before they turn three.
 - (d) It is not an essential part of a child's early experiences with rational counting.

True or False Questions:

- | | | |
|---|---|---|
| 11. Infants cannot turn their heads in the direction of a sound. | T | F |
| 12. Babies cannot learn to walk and talk at the same time. | T | F |
| 13. Children cannot learn to talk without formal instruction. | T | F |
| 14. The concept and process of sorting is evident before a child is five. | T | F |
| 15. One-to-one correspondence is not necessary for rational counting. | T | F |
| 16. Object permanence is not usually understood until a child is three. | T | F |

Fill in the Blank

Fill in the most appropriate word or phrase for each of the following sentences.

17. The mathematical concept that involves organizing and ordering things according to an attribute is called _____.
18. When things with like (similar) attributes are grouped together, the process of this action is called _____.
19. When a toddler is asked to give everyone at his table exactly one cookie each and he can correctly give one cookie to each child at the table, he is exhibiting the mathematics concept of _____.
20. When a child can put 'like (similar) things' together and names the group, she is engaging in _____.

CHAPTER 2

Nurturing Child Development – *Environments That Promote Learning*

Multiple Choice

Choose the best answer for each of the following questions.

1. Which is true about Jean-Jacques Rousseau?
 - (a) He was a psychology student of psychologist Jean Piaget.
 - (b) He was an 18th century philosopher of the Enlightenment.
 - (c) He is the father of constructivism.
 - (d) He is a 20th century psychologist/educator of experiential education.
2. Which idea represents the work of John Dewey?
 - (a) He advanced ideals of experiential education in the 20th century.
 - (b) He contributed to the philosophy of the Enlightenment in the 18th century.
 - (c) He was a student of Jean Piaget's in Geneva, Switzerland.
 - (d) He helped to develop the Stanford-Binet Intelligence Scales.
3. Which statement is true about Jean Piaget?
 - (a) He was a strong proponent of IQ testing.
 - (b) He was a leading behaviorist in the early 20th century.
 - (c) He was an influential leader in cognitive science.
 - (d) He advanced the notion that babies are born as "blank slates".
4. Newmann and Wehlage (1993) provide important information to early childhood professionals. Which statement best defines their work?
 - (a) They examined infant development related to language acquisition.
 - (b) They examined five standards of authentic learning.
 - (c) They developed an evaluation rubric to evaluate the development of perception in infants.
 - (d) They developed a model of problem solving.
5. Katz and Chard (2000) are important researchers in the field of early childhood education. Their most notable contributions can be defined as which of the following ideas?
 - (a) They developed a model of cognitive development based upon behaviorist principles.
 - (b) They advanced the idea of project-based learning where inquiry is child-centered and question-focused.
 - (c) They supported a textbook and worksheet approach and model of curriculum development.
 - (d) They were pioneers in the development of the theory of play.
6. *Classroom culture* is important in education. Which statement best captures the meaning of classroom culture?

- (a) It refers to the ethnic backgrounds of the children and teacher in the classroom.
 - (b) It means the daily classroom routines involving social and academic practices.
 - (c) It is primarily the Social Studies course of study involving global education.
 - (d) It means expanding children's perspectives about cultural similarities.
7. Documenting children's work is important. From this list, which rationale for documenting children's work is most important?
- (a) It is best done through photography.
 - (b) It should only be done for evaluation/grading purposes.
 - (c) It is a way to capture the history and development of children's thinking.
 - (d) It is primarily used for an administrator's evaluation of a teacher's performance.
8. Harlan and Rivkin ((2004) delineate roles teachers have as they allow children to construct curriculum and pose interesting questions to investigate. Which of the following roles is NOT one of Harlan and Rivkin's role?
- (a) The teacher is a facilitator of children's learning.
 - (b) The teacher is an evaluator of student work.
 - (c) The teacher is a catalyst for having children engage in learning.
 - (d) The teacher is a consultant to his/her students.
9. When children explore a set of seashells, which of the following statements is an *inference*?
- (a) I see many shapes.
 - (b) I feel many textures.
 - (c) Some shells smell fishy.
 - (d) Sea shells had real animals living in them.
10. When children explore whole pumpkins on a table, which of the following statements is an *observation*?
- (a) They have seeds in them.
 - (b) We make pies with them.
 - (c) They are orange.
 - (d) They are squishy inside.

True or False Questions:

- 11. An important role for a teacher is that of *facilitator*. T F
- 12. A teacher is the ultimate source of knowledge in the classroom. T F
- 13. Current early childhood philosophy supports teacher-lead learning. T F
- 14. Rousseau's philosophy embraced naturalistic, experiential learning. T F
- 15. Children are capable of designing curriculum. T F

Fill in the Blank

Fill in the most appropriate word or phrase for each of the following sentences.

16. Jean-Jacques Rousseau was part of the intellectual movement called _____.

17. John Dewey advanced the ideas and ideals of _____ education.

18. _____ was a most influential leader in cognitive science.

19. Two educators who have provided contemporary support for the “project approach” are _____ and _____.

20. The term used in this textbook by the authors for the conjectures that children make about what they observe and think is _____.

21. ANSWER KEY

22.

23. Chapter 1 Key

24.

25. 1. b

26. 2. a

27. 3. b

28. 4. b

29. 5. b

30.

31. 11. F

32. 12. F

33. 13. F

34. 14. T

35. 15. T

36. 16. F

37.

38. 17. seriation

39. 18. sorting

40. 19. one-to-one correspondence

41. 20. classifying or classification

42.

43. Chapter 2 Key

44.

45. 1. b

46. 2. a

47. 3. c

48. 4. b

6. c

7. b

8. c

9. c

10. a

6. b

7. c

8. b

9. d

49. 5.	b	10.	c
50.			
51. 11.	T		
52. 12.	F		
53. 13.	F		
54. 14.	F		
55. 15.	T		
56.			
57. 16.	The enlightenment		
58. 17.	Experiential education		
59. 18.	Cognitive science		
60. 19.	Katz and Chard		
61. 20.	theory		