

CHI, II D NAME: _____

As you read...

What is Intelligence?

10-1 Theories of Intelligence-One Ability or Many?

1. Define Intelligence.
2. What is Wechler's theory of intelligence?
3. Describe the two-factor theory of intelligence.
4. When using statistics to discover mutually independent elements, one is using _____.
5. Spearman's basic approach to intelligence is the _____.
6. What is the factor theory of intelligence?
7. Define Associate abilities and Cognitive abilities
8. List Gardner's 8 types of intelligence.
9. The ability to adapt to, shape and select environments in order to accomplish one's goals and those of society is referred to as _____.
10. List and describe Sternberg's 3 dimensions of intelligence.

11. Match the following researchers with the appropriate explanation of their theories of intelligence.

Wechsler's theory

Gardner's view

Sternberg's triarchic view

Spearman's two-factor theory

Jensen's two-level theory

Vygotsky's view

Thurstone's factor-theory

- A) _____ Claimed that associative and cognitive abilities are inherited.
- B) _____ argued that intelligence is not a product rather a process.
- C) _____ Believed intelligence consists of general factors (affecting all performance) and specific factors (affecting specific tasks).
- D) _____ sees intellectual development in a social context.
- E) _____ Has criticized most widely used intelligence tests stating that they are too narrow and don't account for intelligence in the everyday world; believes in multiple types of intelligence.
- F) _____ Criticizes IQ tests as being too heavy on linguistic and mathematical skills.
- G) _____ Developed a computational scheme which described seven factors of intelligence such as word fluency, number facility, perceptual speed, reasoning, and spatial visualization.

12. What are the arguments for a multiple intelligence approach?

13. What are the arguments for a single intelligence approach?

10-2 Emotions- A Different Kind of Intelligence?

14. What is emotional intelligence?

15. How does Goleman describe a person with high emotional intelligence?

16. How does Mayer, Salovey and Caruso's views differ from Goleman's?

- people in the population under consideration would achieve a lower score.
- G) _____ A simple formula to measure intelligence calculated by dividing a person's mental age by the person's chronological age and multiplying the result by 100.
- H) _____ A standard score that has the same mean and standard deviation at all ages. Thus, a child of nine and a child of sixteen, each with an IQ of 115, occupy the same position (they have the same percentile score) relative to others who have taken the same IQ test.
- I) _____ A score that expresses an individual's position relative to the mean based on the standard deviation. It is often derived by converting a raw score to one that can be interpreted on the basis of a population variable such as age or grade. Two examples of this type of score are a percentile score and a deviation IQ.

10-4 Reliability

7. Define reliability.
8. Describe the test-retest method.
9. What are the alternative form and split-half methods?
10. The number of points a score varies due to imperfect reliability is called _____.

10-5 Validity

12. Define validity.
13. List and describe the 4 types of validity.
14. The extent to which a test measures the quality it is supposed to measure is referred to at _____.
15. What are the 6 criticisms of intelligence test validity?

16. The _____ is dangerous for teachers because this effect causes one to judge a particular characteristic about a student based on tests of other characteristics.

Four Important Intelligence Tests

10-6 Stanford-Binet Intelligence Scale

1. Briefly describe the history of the Stanford-Binet Intelligence test.
2. What are the 4 major subscales of the Stanford-Binet Intelligence test?
3. Describe the administration of the Stanford-Binet Intelligence test.

10-7 Wechsler Scales

4. What are the 3 different Wechsler tests and to whom are they administered?
5. How are test items grouped in the Wechsler scales?
6. Are scores comparable across ages?

10-8 Kaufman Assessment Battery For Children

7. For what purpose was the K-ABC designed?
8. List and describe the 4 global scales of the K-ABC.

9. Identify the intelligence test being administered to seven-year-old children in each of the following testing situations.

Stanford-Binet *WISC-III* *K-ABC*

- A) _____ By the time the test has been completed, Trystan will have responded to eleven subtests, each of which contains a series of tasks related to a particular content area. One of the subtests, "Comprehension," requires Trystan to verbally answer questions with common sense answers. Another subtest "Picture Completion" requires that he point to the area in a picture that is missing; he does not have to verbally explain what is wrong with the picture. The data gathered from Trystan's responses to the subtests will produce three deviation IQ scores.
- B) _____ Sarah is given a variety of tasks that do not call upon her language skills or acquired knowledge, but rather require her to process new information and solve novel problems by organizing, sequencing, and integrating the new stimuli that she is being shown. Toward the end of the test she does have to call upon her verbal ability to answer some questions concerning reading comprehension, word identification, and computation.
- C) _____ Aaron is given a variety of tasks that are presented according to his chronological age; the score achieved determines the level at which all other subtests will begin. The content of these subtests varies considerably according to the mental age he is able to achieve. Some of the tasks require verbal responses, others require that he take stimuli presented in the test and call upon his memory, recall, and arranging abilities. When the test is completed, the psychologist will use the data to determine Aaron's mental age.

10-9 The Woodcock-Johnson

10. What 5 things does the Woodcock-Johnson measure?
11. What are the strengths of the Woodcock-Johnson?
12. Define self-fulfilling prophecy.
13. Describe Rosenthal and Jacobson's research and results.

Environmental and Biological Factors in Intelligence

10-10 Cultural Biases?

14. Define cultural bias.
15. When is a test item or subscale considered to be culturally biased?
16. What evidence is there that intelligences tests are not culturally biased?

10-11 Cultural Dimensions of Intelligence

17. What conclusion about culture and intelligence is clear?
18. Why is the typical intelligence test too limited?
19. What are intelligence scores good for?

10-12 Environmental and Genetic Impact

20. Define heritability.
21. What does it mean when a trait is 50% heritable.
22. What has research shown about the heritability of intelligence?
23. Describe the evolutionary perspective on intelligence.

10-13 The Bell Curve

24. What assertions do the author's of The Bell Curve make about intelligence?

25. What arguments are given against these assertions?
26. What are the weaknesses in Herrnstein's and Murray's arguments?
27. Describe the Abecedarian Intervention.
28. What conclusions can be drawn from this research?

10-14 Stability of Intelligence Test Scores

29. What is the general pattern of IQ scores throughout the lifespan?
30. What portions of IQ tests show the most change with age?

10-15 Are There Gender Differences?

32. What are most gender differences due to?
33. How have these differences been diminished?
34. What differences still exist?

Exceptionality and Education

10-16 Giftedness

1. How does the federal government define gifted and talented?
2. List and describe Renzulli's 3 key factors for assessing giftedness.
3. What types of programs exist for gifted students?

4. Are artistic temperament and bipolar disorder linked?

10-17 Special Education- IDEA

5. What is IEP?
6. What are the basic assumptions of IDEA?
7. Define mainstreaming.
8. What is inclusion?

10-18 Mental Retardation

9. Define mental retardation.
10. What 4 things must psychologist who work with the mentally retarded consider?
11. Match the following types of mental retardation with the appropriate description.

Mild Moderate Severe Profound

- A) _____ People in this category have the intellectual ability of a ten-year-old. They need some supervision, but can acquire certain academic and occupational skills. The Wechsler IQ range is 55-69 and approximately 90% are classified in this category.
- B) _____ People in this category show great motor, speech, and intellectual impairment and are almost totally dependent on others to take care of their basic needs. The retardation is often a result of a birth disorder or traumatic injury to the brain. The Wechsler IQ range is 25-39 and approximately 3% are classified in this category.
- C) _____ People in this category are usually institutionalized or dependent on their families. They are somewhat clumsy in motor coordination, posture, and social skills. Their intellectual abilities are comparable to those of a 5 to 6 year-olds. The Wechsler IQ range is 40-54 and approximately 6% are classified in this category.
- D) _____ People in this category are institutionalized and need constant supervision. They are unable to master simple skills and have minimal intellectual and motor skills. Frequently they have physical deformities and congenital defects such as blindness, deafness, and seizures. The Wechsler IQ is below 25 and only 1% are classified in this category.

The Process of Test Development

10-3 Developing an Intelligence Test

1. Define mental age.
2. Define test.
3. What is the purpose of standardization?
4. What does it mean if something is normally distributed.
5. If your mental age is 14 and your chronological age is 12, what is your IQ?
6. Match the following terms to the appropriate definitions.

Standardization

normal curve

percentile score

Norms

raw score

deviation IQ

representative sample

standard score

intelligence quotient

- A) _____ A large group of individuals who match the target population (the group for whom the test is being designed) with regard to important variables such as socioeconomic status and age.
- B) _____ Necessary for standardization, these scores and corresponding percentile ranks are obtained by administering the test to the individuals in the representative sample. When the test is released for general use, the scores of those who take the test will be compared to these scores.
- C) _____ The process of developing a uniform procedure for administering and scoring the test. The test is given to a large sample of people who are matched with regard to important variables so that norms can be determined for the basis of comparison. In addition, time limits for testing and specific guidelines for test administration are established.
- D) _____ The number of correct answers an individual receives on the test. To be meaningful this score must be converted, taking into account the individual's age, sex, and grade level.
- E) _____ A bell-shaped curve that provides a graphic illustration of representative test scores. The data are arranged so that those with low scores fall on the left side of the curve; those with middle range scores fall in the middle of the curve (most people achieve scores in the middle ranges); and those with high scores fall on the right side of the curve.
- F) _____ A standard score that indicates what percentage of

1
2
3

