

1a. What is an example of pseudolistening (a pitfall to effective listening)?

- a. Daydreaming while nodding your head
  - b. Sidetracking a conversation
  - c. Premature replying
  - d. Paying attention to the context
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1b. While Amy is presenting her proposal to the group, Josh is thinking about his weekend fishing trip. Even though he is not listening to a word Amy is saying, he manages to occasionally nod his head in agreement. Josh's behavior is an example of:

- a. Pseudolistening
- b. Premature replying
- c. Attentiveness to the context
- d. Conversation sidetracking

2a. In 1965, the death rate from accidents of all types per 100,000 population in the 15 – 24 age group was:

a. 59.0

b. 59.1

c. 59.2

d. 59.3

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2b. In 1965, the leading cause of death per 100,000 population in the 15 – 24 age group was from:

a. respiratory disease

b. cancer

c. accidents

d. rheumatic heart disease

3a. During what age period is thumb-sucking likely to produce the greatest psychological trauma?

- a. From birth to 2 years old
  - b. From 2 years to 5 years old
  - c. From 5 years to 12 years old
  - d. From 12 years to 20 years old
  - e. 20 years of age or older
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3b. During what age period is thumb-sucking likely to produce the greatest psychological trauma?

- a. Infancy
- b. Preschool period
- c. Before adolescence
- d. During adolescence
- e. After adolescence

4a. Which of the following is a category in the taxonomy of the cognitive domain?

- a. Reasoning ability
  - b. Critical thinking
  - c. Rote learning
  - d. All of the above
  - e. None of the above
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4b. What is the most complex level in the taxonomy of the cognitive domain?

- a. Knowledge
- b. Synthesis
- c. Evaluation
- d. Analysis

5a. *Mycobacterium tuberculosis* is spread primarily by

- a. A virus infecting a susceptible host
  - b. The causative agent of pneumonia
  - c. Poor hand washing techniques
  - d. Inhalation of contaminated droplets
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5b. *Mycobacterium tuberculosis* is

- a. A virus
- b. The causative agent of pneumonia
- c. Spread by poor hand washing techniques
- d. Spread primarily by inhalation of contaminated droplets

## Key

1b – Encourages more meaningful processing of information

2b – In (a) the differences between the options are trivial. (a) also requires memorization of information

3a - In 3b the options are not mutually exclusive

4b – 4a asks for simple identification of a category while 4b asks for differentiation between the levels. Also, 4a has “all of the above” and “none of the above” as choices, which should be avoided

5a – The stem in 5b has insufficient information/insufficient direction to the reader

## Scenario-based

**Before:** The first stage of alcoholism is characterized by

- a. Malnutrition
- b. addiction to alcohol
- c. rationalization of drinking behavior\*
- d. reverse alcohol tolerance

**After:** Susan believes her drinking behavior will lessen once she finishes a big project. Susan's explanation is particularly representative of the

- a. first stage of alcoholism\*
- b. second stage of alcoholism
- c. third stage of alcoholism
- d. fourth stage of alcoholism

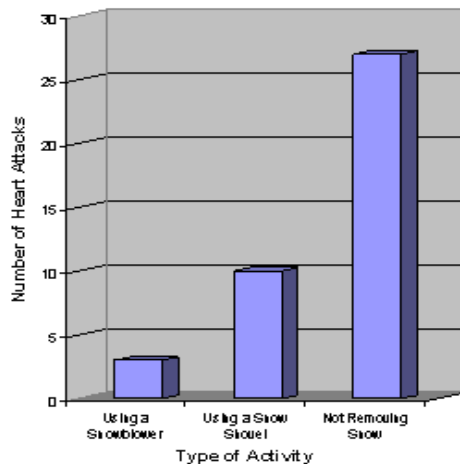
**Before:** Which of the following are measures of morbidity? (check all that apply)

**After:** A researcher is interested in recording the number of individuals in a particular geographic region who have a common cold at some point during the month of February 2001. Which of the following measures of morbidity would be most appropriate in answering this question?

## Visual Analysis

The figure below illustrates the number of deaths in the Chicagoland area from heart attacks that occurred during snow removal or non-removal activity in the three-day period from December 14-16, 2000.

**Suggested Basis for Heart Attacks in Chicagoland Area  
(Dec. 14-16, 2000)**



- A correct conclusion that could be drawn from the above graph is
- It was more dangerous to shovel snow than to use a snowblower
  - It was less dangerous to engage in snow removal activity than not to engage in snow removal activity
  - More deaths were related to non-snow removal activities than to snow removal activities\*
  - People with heart conditions should purchase a snowblower

**Before:** Which country has the largest population?

**After:** What does this graph predict about world population in the year 2020?



## Case Study

*Two researchers were studying the relationship between amount of sleep each night and calories burned on an exercise bike for 42 men and women. They were interested if people who slept more had more energy to use during their exercise session. They obtained a correlation of .28, which has a two-tailed probability of .08. Alpha was .10.*

1. Which is an example of a properly written research question?
  - a. Is there a relationship between amount of sleep and energy expended?\*
  - b. Does amount of sleep correlate with energy used?
  - c. What is the cause of energy expended?
  - d. What is the value of rho?
  
2. What is the correct term for the variable amount of sleep?
  - a. Dependent\*
  - b. Independent
  - c. Predictor
  - d. y
  
3. What is the correct statistical null hypothesis?
  - a. There is no correlation between sleep and energy expended
  - b. Rho equals zero\*
  - c. R equals zero
  - d. Rho equals r

**Rewrite these knowledge check questions to one that addresses higher-order thinking**

1. What is the correct definition of “arithmetic mean?”
  - a. The middle number when numbers are arranged in order.
  - b. The number obtained by dividing the sum of the numbers by the amount of numbers added.
  - c. The difference between the highest and the lowest numbers in a set of numbers.
  - d. The number that you see more than any other number.
  
2. What is the first concern of an emergency worker?

Sources:

1. <http://ctl.utexas.edu/assets/Evaluation--Assessment/Writing-Good-Multiple-Choice-Exams-04-28-10.pdf>
3. <http://www.utexas.edu/academic/ctl/assessment/iar/students/planning/method/exams-mchoice-write.php>
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6. <http://jfmuller.faculty.noctrl.edu/toolbox/tests/morethanfacts.htm>
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