Module 3 - Objective 3

To successfully complete this Learning Outcome Guide, you should be able to recognize the different cognitive levels that are assessed with a multiple choice question and how that impacts the difficulty of the question, as well as preparation that is required for the question.

Lesson Presentation

Bloom's Taxonomy

Bloom's taxonomy is a method of classifying the cognitive levels of learning. Explore the different classifications of Bloom's Taxonomy.

These levels of learning are important to multiple choice questions as they affect the degree of difficulty to respond to the question. Generally speaking, the classifications are compressed into three categories for the certification examination.

These include:

- Knowledge/comprehension
- Application
- Critical thinking (includes analysis, synthesis and evaluation)

The knowledge/comprehension cognitive level requires you to recall previously learned material and to understand its meaning. The application level requires the ability to apply knowledge and learning to new or practical situations. Critical thinking is a higher level thinking process. This requires you to understand both the content and structure of the material (ie: to analyze or compare, etc.); to formulate something new from existing knowledge and skills (ie: develop or propose, etc.); to judge the value of something for a given purpose (to evaluate or interpret, etc.).

As the cognitive level increases, the degree of difficulty of the item also increases. Let's explore a topic, using different cognitive levels to the question.

Knowledge/Comprehension

1. Hemoptysis is:
    a. blood in the pleural space
    b. an infection of the lung
    c. epistaxis
    d. coughing up fresh or old blood
    e. Hemothorax

This question requires that you know the definition of hemoptysis. The right answer is d and the rest are called distractors. This is an example of a basic knowledge question.

Application

2. Deviation of the trachea toward the unaffected side may occur in:
    a. Atelectasis
    b. tension pneumothorax
    c. consolidation
    d. pulmonary edema
    e. Asthma

This question requires not only that you know that the trachea can deviate during certain disease processes, but it requires you to identify what disease can shift the trachea. In addition, you must know the specifics of the disease process and why the trachea can shift. As well, you must know what would cause the trachea to shift to the right or left. The level of thinking and knowledge required is at a much higher level and thus creates a more difficult question.

Critical Thinking

On the diagram, indicate what fissures and sections of the lungs you would be auscultating?

To answer this question requires you to know several things:

- The criteria for determining the fissures location.
- Where the lobes of the lungs are located
- Positioning of the stethescope

To be able to accurately respond to items requires that you break down the aspects of the question, so that you can think of the concepts that you must recall. Once you have recalled the necessary concepts, then you must evaluate the information provided in the options to select the best response.