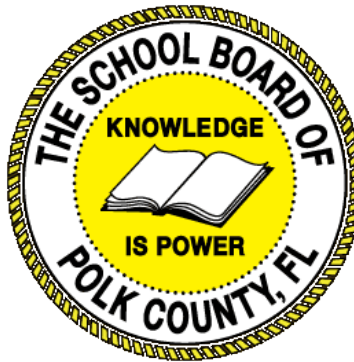




Individual Test Item Specifications

8111530- Vet Assisting 5

2015



The contents of this document were developed under a grant from the United States Department of Education. However, the content does not necessarily represent the policy of the United States Department of Education, and you should not assume endorsement by the federal government.

Table of Contents

I. Guide to the Individual Benchmark Specifications	1
Benchmark Classification System	1
Definitions of Benchmark Specifications	3
II. Individual Benchmark Specifications	4

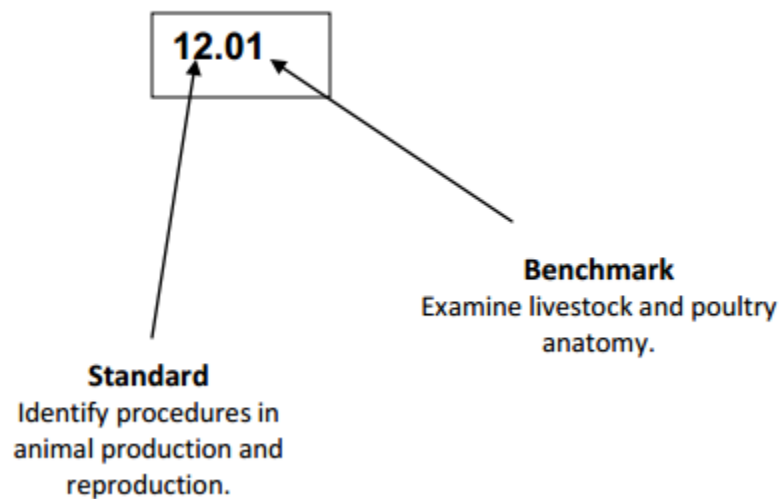
I. Guide to the Individual Benchmark Specifications

Content specific guidelines are given in the *Individual Benchmark Specifications* for each course. The *Specifications* contains specific information about the alignment of items with the Florida Standards. It identifies the manner in which each benchmark is assessed, provides content limits and stimulus attributes for each benchmark, and gives specific information about content, item types, and response attributes.

Benchmark Classification System

- Each Career and Technical Education course has its own set of course standards. The benchmarks are organized numerically, with two numbers separated by a decimal point. The first number is the standard number, and the second number is the benchmark number. You will see these numbers on the Item Specifications for each course.

An example, from Agritechnology 1:



The image above describes the components of a Career and Technical Education Standard and Benchmark classification system.

Each MAFS benchmark is labeled with a system of letters and numbers.

- The four letters in the *first position* of the label identify the **Subject**.
- The number(s) in the *second position* represents the **Grade Level**.
- The letter(s) in the *third position* represents the **Category**.
- The number in the fourth position shows the **Domain**.
- The number in the *fifth position* identifies the **Cluster**.
- The number in the last position identifies the specific **Benchmark**.



The image above describes the components of a Florida Standard and Benchmark classification system.

Definitions of Benchmark Specifications

The *Individual Benchmark Specifications* provides standard-specific guidance for assessment item development for the Florida Department of Education Career and Technical Education item banks. For each benchmark assessed, the following information is provided.

Reporting Category	is a grouping of related benchmarks that can be used to summarize and report achievement.
Standard	refers to the standard statement presented in the Florida Standards.
Benchmark	refers to the benchmark statement presented in the Florida Standards. In some cases, two or more related benchmarks are grouped together because the assessment of one benchmark addresses another benchmark.
Item Types	are used to assess the benchmark or group of benchmark.
Cognitive Complexity	ideal level at which item should be assessed.
Benchmark Clarifications	explain how achievement of the benchmark will be demonstrated by students. In other words, the clarification statements explain what the student will do when responding to questions.
Content Limits	define the range of content knowledge and that should be assessed in the items for the benchmark.
Stimulus Attributes	define the types of stimulus materials that should be used in the items, including the appropriate use of graphic materials and item context or content.
Response Attributes	define the characteristics of the answers that a student must choose or provide.
Content Focus	addresses the broad content and skills associated with the examples found in the standards, benchmarks, or benchmark clarifications.
Sample Items	are provided for each type of question assessed. The correct answer for all sample items is provided.

II. Individual Benchmark Specifications

Standard	38.0 Groom selected companion and livestock animals – the students will be able to:
Benchmark	38.02 Demonstrate a basic knowledge of using clippers to cut animal hair/fur as needed for both cosmetic and therapeutic reasons.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	L, H
Benchmark Clarification	Students will illustrate proper to groom animal hair/fur and understand when it is required for cosmetic or therapeutic reasons.
Content Focus	Safety concerns for both animal and groomer which may include but is not limited to keeping away from water while using electric clippers, keeping safe distances around the eyes, and sensitive areas, and using proper sized clipper blades for specific clipping practices. Maintenance of equipment, keeping them cleaned and oiled as well as proper storage.
Content Limits	Items should be limited to basic operational instructions of clippers, safety concerns for both the pet and human when using clippers, and proper maintenance and care of clippers after use.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	Which fluid should be used to lubricate clipper blades? A. grease B. oil C. soap D. water Correct-B

Standard	38.0 Groom selected companion and livestock animals – the students will be able to:
Benchmark	38.04 List precautions in bathing and dipping including avoiding soap or chemicals in the eyes, lathering the entire body, timing the shampoo application according to directions, and towel or blow drying.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=
Cognitive Complexity Level	Low MC High PT
Benchmark Clarification	Students will apply proper techniques to safely bathe, dip, and dry live stock animals.
Content Focus	Precautions for bath and/or dipping animals which may include but are not limited to avoiding soap or chemicals in the eyes, lathering the entire body, timing the shampoo application according to directions, and towel or blow drying.
Content Limits	Items should be limited to listing, identifying and/or describing the precautions one should take to avoid harm to the animal or human, as well as the precautions that may be listed on the directions of the bottle.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	When using a medicated shampoo, how long should one typically allow the medication to sit on the skin before rinsing? A. 1-2 minutes B. 5-10 minutes C. 15-20 minutes D. 25-30 minutes Correct-B

Standard	38.0 Groom selected companion and livestock animals – the students will be able to:
Benchmark	38.11 Discuss proper hoof care and hoof trimming needs.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low MC High PT
Benchmark Clarification	Students will explain how to care for horses hooves which should include preventative care, regular maintenance, and trimming.
Content Focus	Focus should include proper trimming techniques including frequency, equipment needed, appropriate trim length, when shoes or alternate care may be needed, as well as proper training in hoof trimming.
Content Limits	Items should be limited to hoof care and trimming needs of equine. Items should be limited to trimming techniques (including but not limited to trimming length, hot to trim, how to apply shoes, and corrective trimming techniques). Items may address trimming equipment and restraint of the animal while performing the task.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	How often should horses hooves be picked? A. daily B. weekly C. monthly D. quarterly Correct-A

Standard	39.0 Describe exotic animals and the effects of captivity on them – the students will be able to:
Benchmark	39.02 Identify exotic animals native and invasive to Florida.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low/Moderate
Benchmark Clarification	Students will classify and differentiate native and invasive species that form part of Florida's biodiversity.
Content Focus	Definition and examples of exotic and invasive animal species found in Florida.
Content Limits	Items should be limited to common exotic and invasive species found in Florida. Items may direct student to identify animal species by physical characteristics, common habit structure, environmental indicators, and/or by the negative effects they may cause on Florida native species and the environment.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	Which species is non-native to Florida? A. burmese python B. key deer C. mallard duck D. saltwater crocodile Correct-A

Standard	39.0 Describe exotic animals and the effects of captivity on them – the students will be able to:
Benchmark	39.04 Describe the roles of the Florida Fish and Wildlife Conservation Commission in wildlife management.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=X
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	Students will describe and identify the basic roles and responsibilities of the FWC as it relates to wildlife management.
Content Focus	Focus should be on the four components of the FWC: -Research -Management -Enforcement -Outreach Focus should include how these components relate to wildlife management.
Content Limits	Items should be limited to the roles and responsibilities of the FWC (research, management, enforcement, and outreach) as they relate to wildlife management. Items may include job duties and specific tasks FWC employees may be involved with to care for Florida's wildlife.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	Which is not a role of the FWC? A. enforcement B. philanthropy C. outreach D. education Correct-B

Standard	40.0 Assess techniques used in surgical assisting and surgical preparation – the students will be able to:
Benchmark	40.01 Prepare and sterilize surgical equipment and supplies. Explain standard procedure for cleaning and lubricating all stainless steel instruments. Explain appropriate use of ultrasonic instrument cleaning and proper solutions. Explain cold sterilization trays and appropriate solutions. Demonstrate assembly and wrapping of surgical packs for sterilization. Demonstrate folding and wrapping a surgical gown for sterilization. Explain proper procedure for sterilizations methods including the autoclave and gas sterilization (ethylene oxide) including safety precautions with each.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=# (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	Students will demonstrate proficiency in sterilization techniques common to an animal hospital.
Content Focus	Sterilization techniques should focus on utilizing one of the following methods: -cold sterilization -dry heat -autoclave -radiation -filtration -physical cleaning -ultrasound
Content Limits	Items should focus on but not limited to the seven sterilization techniques. Items should focus on but not limited to procedures for obtaining sterilization of equipment and supplies, maintenance of instruments, and wrapping gown packs for surgery,.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	Which sterilization method is best suited for sterilizing sugrical instruments? A. physical cleaning B. dry heat C. cold sterilization D. autoclave Correct-D

Standard	40.0 Assess techniques used in surgical assisting and surgical preparation – the students will be able to:
Benchmark	40.04 Identify proper post-surgical care techniques. List parameters to monitor during recovery and signs of distress in the recovery period. Explain the swallow reflex and the appropriate time and method for endotracheal tube removal. Explain appropriate transfer of animal from surgery to recovery kennel, positioning in kennel, and precautions in kennel. Confirm “No food or water” or similar instructions on recovery kennel.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=XX (SA)= (P)= (ER)=X
Cognitive Complexity Level	Low, Moderate
Benchmark Clarification	Students will demonstrate proficiency on post-surgical care common to an animal hospital.
Content Focus	Focus should be on post surgical care, monitoring the patient, and recovery of the patient.
Content Limits	Items should focus on but are not limited to post-surgical care techniques, monitoring recovery and the equipment that may be used to do so, reflexes to evaluate, removal of endotracheal tubes, transferring patient from surgery to recovery area, and post surgical instructions given by veterinarian.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	Which vital sign typically drops after surgery? A. heart rate B. respiratory rate C. temperature D. capillary refill time Correct- C

Standard	41.0 Demonstrate knowledge of pharmacology – the students will be able to:
Benchmark	41.02 Explain the application of topical flea medication which is absorbed through the skin and precautions for safety of pets and humans.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=X
Cognitive Complexity Level	Low MC High PT
Benchmark Clarification	Students will explain the step by step procedures involved in the application of topical flea medication, explain the safety concerns and/or precautions that should be taken into consideration for both the pet and the human.
Content Focus	Safety concerns for human and pet. Proper application techniques, application sites, length the animal should avoid self bathing, precautions with physical contact with humans and pets post application.
Content Limits	Items should be limited to the steps associated with applying topical flea medication to small animals. Items may address proper application sites and handling of the medication. Items may address safety concerns for the pet and human which may include but are not limited to length the animal should refrain from self grooming, appropriate safety equipment (gloves), and avoiding contact with eyes, nose, and mouth.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	How old must a kitten be before it can receive topical flea prevention? A. 4 weeks B. 8 weeks C. 12 weeks D. 16 weeks Correct- B

Standard	41.0 Demonstrate knowledge of pharmacology – the students will be able to:
Benchmark	41.04 Demonstrate administration of a tablet or capsule to a cat and to a dog.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low/Moderate
Benchmark Clarification	Students will demonstrate how to administer tablets and/or capsules orally to a dog or cat.
Content Focus	Proper steps in administration of oral medication. Safety concerns for both pet and human which may include but is not limited to proper restraint and safety equipment (muzzle, gloves, pet piller).
Content Limits	Items may direct student to demonstrate task. Items should be limited to oral administration of tablets or capsules to dogs and cats. Items may address proper restraint techniques utilized while completing the procedure.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	Which tool can be used to administer tablets orally to canines? A. syringe B. pet piller C. metal balling gun D. endotracheal tube Correct-B

Standard	41.0 Demonstrate knowledge of pharmacology – the students will be able to:
Benchmark	41.06 Explain per os, oral, topical, parenteral, and injectable in terms of administering pharmaceuticals.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low/Moderate
Benchmark Clarification	Students will explain the meaning of the terms per os, topical, parenteral, and injectable and how they relate to the administration of various medications.
Content Focus	Definition of per os, oral, topical, parenteral.
Content Limits	Items should be limited to the definition and examples of the terms per os, oral, parenteral, and injectable as they relate to administration of medications. Items may address where these routes of administration would be. Items may include common medications administered by these varying routes.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	What does the term per os mean? A. by nose B. by mouth C. by injection D. by topical application

Standard	41.0 Demonstrate knowledge of pharmacology – the students will be able to:
Benchmark	41.08 List the components that must be present on a prescription label.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low
Benchmark Clarification	Students will recall and understand the primary components of a prescription label.
Content Focus	Definition of per os, oral, topical, parenteral.
Content Limits	Items should be limited to only those components required by law to be on a prescription label.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	What is not required on a prescription label? A. reason for prescription B. prescribing doctors name C. name of drug and concentration D. patients identifying information Correct-A

Standard	41.0 Demonstrate knowledge of pharmacology – the students will be able to:
Benchmark	41.13 Describe the process for administering medications by injection, oral, nasal and topical.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=X
Cognitive Complexity Level	Low MC High PT
Benchmark Clarification	Students will explain the step by step procedures required for administering medication orally, nasally, topically, or by injection.
Content Focus	Proper steps in administration for each of the specified routes. Safety for human and pet which may include but is not limited to restraint techniques, proper sites for administration, appropriate safety equipment.
Content Limits	Items should be limited the process of administration of medications by injection, oral, nasal, or topical application only. Items may request step by step procedures or explanation of the process. Items may address safety concerns for both human and pet, proper restraint techniques, safety equipment (ex. muzzle, gloves).
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	<p>What safety precaution should one take when administering a topical ointment?</p> <p>A. wear gloves B. wear a mask C. wear a lead apron D. wear shoe covers</p> <p>Correct- A</p>

Standard	42.0 Explain proper methods of syringe and hypodermic needle use – the student will be able to:
Benchmark	42.01 Identify and give the correct alignment from smallest to largest of hypodermic needles including 12 g, 18g, 20g, 22 g and 25 g.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=
Cognitive Complexity Level	Low
Benchmark Clarification	Students will correctly arrange hypdermic needles according to size.
Content Focus	Familiar with sizes and color coding.
Content Limits	Items should be limited to determining needle gauge by visual inspection and/or which size is best suited for a particular task. Items may address the color coding widely used for needle gauge. Items may direct student to arrange needles from smallest to largest.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	Which is the smallest size needle? A. 12 gauge B. 18 gauge C. 20 gauge D. 22 gauge Correct- A

Standard	42.0 Explain proper methods of syringe and hypodermic needle use – the student will be able to:
Benchmark	42.02 Identify specified needle gauge and length when requested.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low
Benchmark Clarification	Students will recall specified needle gauge and length.
Content Focus	Familiar with sizes and color coding.
Content Limits	Items should be limited to determining needle gauge and length by visual inspection and/or which size is best suited for a particular task. Items may address the color coding widely used for needle gauge.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	When drawing blood for a heartworm test on an adult labrador retriever, which size needle gauge would be most appropriate? A. 12 gauge B. 16 gauge C. 20 gauge D. 24 gauge Correct- D

Standard	42.0 Explain proper methods of syringe and hypodermic needle use – the student will be able to:
Benchmark	42.03 Identify and align from smallest to largest commonly used syringes including 3cc, 6cc, 12cc, 20cc, 35cc, 60cc and 1cc tuberculin or insulin syringe.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low
Benchmark Clarification	Students will arrange tuberculin or insulin syringes by size.
Content Focus	Determining volume and reading measurements.
Content Limits	Items should be limited to reading volume and/or identifying syringe sizes. Items may address different types of syringes which may include but are not limited to luer lock, catheter, and eccentric.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	Which syringe is the largest? A. 1cc B. 3cc C. 6cc D. 12cc Correct D

Standard	42.0 Explain proper methods of syringe and hypodermic needle use – the student will be able to:
Benchmark	42.04 Identify specified syringe size when requested.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=
Cognitive Complexity Level	Low
Benchmark Clarification	Students will select the appropriate specified syringe size for a specific situation.
Content Focus	Syringe sizing by volume capacity. (1cc, 3cc, 6cc, 12cc, 15cc, etc.)
Content Limits	Items should be limited to identifying syringes by volume capacity. Items may direct students to identify by characteristics or visual examples.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	Which size syringe is most appropriate for a rabies vaccine? A. 1 cc B. 6 cc C. 12 cc D. 15 cc Correct- A

Standard	42.0 Explain proper methods of syringe and hypodermic needle use – the student will be able to:
Benchmark	42.05 Demonstrate the ability to read the precise volume of medication in a syringe and to fill a syringe with medication to a specified volume when requested.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	Low/Moderate
Benchmark Clarification	Students will apply learned skills to correctly fill a syringe to a specific volume. Also, the student will accurately report the volume of medication in a syringe.
Content Focus	Determining volume and reading measurements. Filling a syringe to a specified volume.
Content Limits	Items should be limited to reading the volume of syringes. Items may direct students to fill a syringe to a specified amount. Items should be limited to how to properly fill a syringe.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	Which syringe size is best suited for measuring 4.7 cc of fluid? A. 1 cc B. 3 cc C. 6 cc D. 12 cc Correct- C

Standard	42.0 Explain proper methods of syringe and hypodermic needle use – the student will be able to:
Benchmark	42.06 Describe appropriate SQ, IM, and IV injection sites.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)=X (P)= (ER)=
Cognitive Complexity Level	Low/Moderate
Benchmark Clarification	Students will identify and/or describe appropriate injection sites for subcutaneous, intramuscular, and intravenous injections for large and small animals.
Content Focus	Definition of SQ, IM, and IV. Proper injection sites for varying tasks which may include but are not limited to vaccines, venipuncture, and/or administration of fluids and medications.
Content Limits	Items should be limited to directing students to appropriate injection sites by describing proper site location and/or as it relates to a specific task.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, diagrams, and/or tables.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, charts, and/or videos.
Sample Item	When administering subcutaneous fluids to an adult feline, which site is the best for administration? A. at the base of the tail B. between the should blades C. on the hanuches D. on the belly Correct- B