Agriculture / Small Animal Care II

Time Frame	SOL Objective/ Competency	Essential Understandings/Questions	Essential Knowledge/Skills
1st Quarter **(First 4½ Weeks)** **Demonstrating Workplace Readiness Skills: Personal Qualities and People Skills**	Demonstrate positive work ethic.	• How do you define *positive work ethic?* • How can a positive work ethic guide your behavior at work? • Why is a positive work ethic valued by teachers and employers? • Where did you acquire attitudes and beliefs regarding a work ethic? Is it possible to change attitudes and behaviors? What resources are available to help you strengthen your work ethic?	• maintaining punctual and consistent attendance (e.g., accounting for hours worked, arriving on time for work or appointments) • taking direction willingly (e.g., using active listening techniques, approaching the assigned task with motivation) • exhibiting motivation to accomplish the task at hand (i.e., remaining on task and completing the task efficiently).
	Demonstrate integrity.		• identifying and abiding by laws and workplace policies (e.g., using personal and sick leave only when necessary) • respecting the property of the employer and coworkers • identifying how one's actions and behavior can have far-reaching effects (e.g., personal behavior affects others nearby; business decisions can have global implications or impact the environment) • exhibiting honesty and reliability.
	Demonstrate teamwork skills.	• What team skills are helpful at school? In the workplace? • What are the various roles of team members? • What are the consequences of using the strengths of team members? Of not using the strengths of team members? • What can you do to integrate	• contributing to the success of the team (e.g., brainstorming solutions, volunteering, performing in accordance with the assigned role) • assisting others (e.g., supporting team members and leaders,

		a new person into your group or team?	taking initiative) • requesting help when needed (e.g., asking questions after consulting manuals on policies and procedures, knowing when to seek help from coworkers and supervisors).
	Demonstrate self-representation skills.	• What is the relationship between self-image and self-representation skills? • Why are self-representation skills important in school? On the job? • How can you improve your self-representation skills? • What techniques can you employ to overcome shyness? To overcome nervousness?	• dressing appropriately (i.e., adhering to professional rather than personal standards, following dress code) • maintaining personal hygiene • using language and manners suitable for the workplace (i.e., adhering to respectful, polite, and professional practices).
	Demonstrate diversity awareness.		• working in a respectful and friendly manner with all customers and coworkers (i.e., treating all with the same degree of professional respect), regardless of national origin, race, appearance, religion, gender, disability, or age • respecting cultural differences encountered in the workplace
	Demonstrate conflict-resolution skills.		• negotiating diplomatic solutions to interpersonal conflicts in the workplace (e.g., personality issues, cultural difference issues, disagreements over how to handle work projects, performance issues).
	Demonstrate creativity and resourcefulness.	• How do you demonstrate independence and initiative at school? At work? • How can independence and initiative impact your school	• contributing new ideas (e.g., for improving products and procedures) • displaying initiative

		goals? Career goals? • How would you suggest that a worker demonstrate independence and initiative without overstepping his or her authority?	readily, independently, and responsibly • dealing skillfully and promptly with new situations and obstacles • developing operational policies and procedures that use resources in a sustainable manner.
Demonstrating Workplace Readiness Skills: Professional Knowledge and Skills	Demonstrate effective speaking and listening skills.	• How do the professional standards and practices in your chosen field reflect the need for good speaking and listening skills? • How can miscommunication interfere with your performance in the workplace? • What resources are available to help you develop speaking and listening skills? • What are some potential consequences of having poor oral communication skills? • What do employers expect from job applicants and workers in terms of communication skills?	• communicating effectively with customers and fellow coworkers (e.g., avoiding the use of slang, being pleasant and helpful) • exhibiting public and group speaking skills • comprehending details and following directions • repeating directions or requests to ensure understanding (i.e., practicing active listening).
	Demonstrate effective reading and writing skills.	• What level of reading is required on the job? • Would you like to raise your reading level? Why, or why not? How could you improve your reading skills? • What level of writing skills do you need to hold a technical job? A professional-level job? • What writing skills do you need to improve? What resources are available to help you? • How do reading and writing skills directly impact your nonoccupational activities? (In other words, how can competent skill levels of reading and writing help you succeed as an individual, as a family member, as a citizen?) • Can technology help you improve your writing skills? If so, how?	• reading and correctly interpreting workplace documents (e.g., instructional manuals, work orders, invoices, memorandums) • writing clear, correct language, appropriate to audience.
	Demonstrate critical-thinking and problem-solving skills.	• What are some examples of problem-solving and decision-making methods, and how are	• recognizing, analyzing, and solving problems that arise in completing

		they alike and different? • What are the consequences of using a reasoning approach to problem solving and decision making? What are some potential consequences of using a non-reasoning approach? • What steps are involved in implementing the solution to a problem? • Why do you need to test a solution or decision?	assigned tasks • identifying resources that may help solve a specific problem • using a logical approach to make decisions and solve problems.
	Demonstrate healthy behaviors and safety skills.		• managing personal health (e.g., setting short-, medium-, and long-term physical-fitness goals; eating non- or minimally-processed foods) • following safety guidelines (e.g., adhering to Occupational Safety and Health Administration [OSHA] standards and instructor and manufacturer guidelines).
	Demonstrate an understanding of workplace organizations, systems, and climates.	• Why is it important to know where you fit into your family, your circle of friends, your school, and other groups or communities? • How do a company's vision and mission statements help you understand the big picture of the company's structure and organization? How does a knowledge of All Aspects of the Industry help? • How can a knowledge of the big picture of an industry help you with career planning?	• identifying "big picture" issues (e.g., the organization's structure, culture, policies, and procedures, as well as it's role and status within the industry, economy, and community) • acknowledging the economic, political, and social relationships that exist at multiple levels (e.g., local, national, international) throughout the world • explaining one's role in fulfilling the mission of the organization.

	Demonstrate lifelong-learning skills.		- continually acquiring new industry-related knowledge - improving professional skills to stay current in the field and to promote personal advancement - seeking education and experiences that enhance personal growth.
	Demonstrate job-acquisition and advancement skills.		- preparing to apply for a job (e.g., performing a job search, developing a résumé, preparing for an interview) - identifying steps for seeking promotion (e.g., taking advantage of professional development opportunities, offering to accept additional assignments, learning new skills).
	Demonstrate time-, task-, and resource-management skills.	- What is the relationship between attendance at school or work and ethical behavior? Between attendance and professionalism? Between attendance and time management? - How do you feel about people who always seem to be late for everything? - How can you improve your time-management skills?	- organizing and implementing a productive plan of work (e.g., setting and meeting short-, medium-, and long-term professional goals) - working efficiently to make the best use of time - managing personnel to capitalize on their strengths while respecting their professional desires - maintaining equipment to ensure longevity and efficiency - using natural resources (and products made from them) in a sustainable manner.
	Demonstrate job-	What mathematics skills are	using mathematical

	specific mathematics skills.	required to attain an entry-level job in your chosen field? Are more complex mathematics operations required for higher-level jobs? If so, what are they? • What resources are available to help you improve your mathematics skills? • Why is mathematics considered a communication skill?	reasoning and processes to accomplish job-specific tasks (e.g., using geometry and algebra to predict required supplies for a construction job, using computer mathematics to create a programming algorithm) • making calculations related to personal finance (e.g., wage rates, paycheck deductions, taxes).
	Demonstrate customer-service skills.	• What does having a positive attitude mean in terms of work behavior? • How does a positive attitude help you in your personal life? In school? At work? • Why do you think employers put a premium on employees having a positive attitude?	• addressing the needs of all customers (e.g., proactively engaging customers until they are satisfied) • providing helpful, courteous, and knowledgeable service (e.g., displaying a positive attitude, treating all customers with the same degree of professional respect, sharing information and knowledge honestly and forthrightly).
Demonstrating Workplace Readiness Skills: Technology Knowledge and Skills	Demonstrate proficiency with technologies common to a specific occupation		• selecting and safely using technological resources (e.g., equipment, machines, tools, electronics) to accomplish work efficiently and productively, while considering environmental impacts of such technologies.
	Demonstrate information technology skills.	• What basic level of computer literacy is required for the world of work? • What goals do you have in terms of computer literacy? What resources are available to help you meet your goals?	• working with hardware, file-management techniques, and IT software/programs effectively and on various operating systems • working with equipment and software specific to occupation • seeking additional

			technology to improve work processes and products.
	Demonstrate an understanding of Internet use and security issues.	• Is the information provided through the use of technology more reliable and relevant than information obtained in other ways? Explain your answer. • What are some possible consequences of submitting personal information to Internet sites? • How can you protect your privacy and personal safety while using computer technology?	• using the Internet efficiently and ethically for work • identifying the risks of posting personal and work information on the Internet (e.g., on social networking sites, job search sites) • taking measures to avoid Internet security risks (e.g., viruses, malware).
	Demonstrate telecommunications skills.		• selecting and using telecommunications devices (e.g., portable digital assistants, smart devices, cellular phones), services (e.g., digital subscriber line, cellular network, cable, Internet), and Web-based applications (e.g., Webmail, social networking, online auctions, wikis), appropriate to work assignments.
Examining All Aspects of an Industry	Examine aspects of planning within an industry/organization.	• Where can you find examples of strategic plans that align with a business or industry in your area of interest? • What lessons can you learn by comparing successful and unsuccessful businesses? • What might be some consequences of inadequate business planning?	• development of vision and mission statements • setting of performance goals and objectives • review of previous performance (e.g., productivity, profit) • evaluation of current assets • formulation of strategic and operational plans • use of planning tools (e.g., market research, budget analysis, decision-making models, competitive analyses) • determination of human, natural, technology, and capital resource needs • forecasting of trends • anticipation of changes

		in the business climate (e.g., economic factors, laws, regulations, taxes) • anticipation of and compensation for organizational and industry risk.
	Examine aspects of management within an industry/organization.	• What opportunities and/or activities can provide experience in management? • What are your personal characteristics, habits, and activities that would be helpful in a professional management position?	• impact of the organization's structure and culture on operations • process for accomplishing goals, using available human, natural, technology, and capital resources • ways of ensuring open communication channels • ways of enabling workers to fulfill their responsibilities • evaluation of workers' performance • provision of training and job-growth opportunities to workers • assurance of worker equity, access, and safety • resolution of conflicts • performance of employment functions (e.g., recruiting, hiring, retaining, discharging).
	Examine aspects of financial responsibility within an industry/organization.	• What resources are available to assist you with the various financial functions? • What are possible consequences of not having in place checks and balances for the full range of a business's finances?	• accounting processes • financial decision-making processes, including budget development • methods of acquiring capital • management of financial operations, including payroll, transactions, records, and reports.
	Examine technical and	• How can you, as a worker,	• industry-related

	production skills required of workers within an industry/organization.	determine the necessity to develop and/or upgrade industry-related production skills? • What are some consequences of using good communication skills? Of using poor communication skills? • What is the importance of having more than one person analyze information in order to make decisions? • What steps can you take to develop industry-related interpersonal and team-player skills?	technical skills (e.g., communication, mathematics, science, technology, time-management, and creative-thinking skills) • industry-related production skills (specific skills used for production of goods or services) • industry-related interpersonal and team-player skills.
	Examine principles of technology that underlie an industry/organization.	• What resources are available to the employee who wants to upgrade job skills? • What are examples of ethical issues related to technologies?	• technological systems used in the industry • impact of technological systems on production of goods and services • mathematical, scientific, social, ethical, and economic principles underlying the technological systems • importance of keeping technological skills and knowledge current.
	Examine labor issues related to an industry/organization.	• What practices and methods of communication between management and labor would lead to understanding and implementing worker rights and responsibilities? • How important is compromise when dealing with labor issues?	• workers' rights and responsibilities (e.g., wages, benefits, working conditions) • role of employment contracts and agreements • role of certification, licensure, and other requirements for specific jobs/occupations • role of labor organizations and other worker advocacy groups (e.g., professional/trade associations).
	Examine community issues related to an	• In what ways can an industry enhance the community in	• impact of the organization on the

	industry/organization.	which it is located? • How can members of the community effectively communicate their needs and concerns to a local industry? • What are examples of programs that bring together businesses and communities?	community (e.g., provision of jobs, tax revenue, and goods/services; involvement in community programs/activities; environmental impact) • impact of the community on the organization (e.g., employee base; local taxes and regulations; local government services such as roads, schools, utilities; other local services).
	Examine health, safety, and environmental issues related to an industry/organization.	• What environmental concerns should an industry address? • What environmentally-friendly practices and resources are available to an industry? • What methods can be used to motivate employees to become involved in effective health, safety, and environmental practices? • What forewarnings and preventive measures are available to lessen the likelihood or impact of emergencies such as personal illness or injury, tornadoes, fires, nuclear accidents, floods, and incidences of employee rage or violent behavior?	• responsibility for workers' health and safety • laws/regulations and practices affecting workers' health and safety • health and safety hazards • health and safety programs • responsibility for the environment • laws/regulations and practices affecting the impact on the environment • sustainability initiatives.
Addressing Elements of Student Life	Identify the purposes and goals of the student organization.		•providing opportunities for personal development and preparation for adult life •providing opportunities for making decisions and assuming responsibilities •encouraging democracy through cooperative action •preparing for multiple, nontraditional roles in society •promoting greater understanding between

			youth and adults. •promoting personal growth and leadership development • helping students develop life skills in the areas of character development and ethical behavior, creative and critical thinking, interpersonal communication, practical knowledge, and career preparation.
	Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.		•development of leadership and other life skills, including planning, goal setting, problem solving, decision making, and interpersonal communication •opportunities for school and community service •development of interpersonal relationships •opportunities for experiential learning •opportunities to compete in student events on local, state, and national levels •access to professional information and opportunities •opportunities for career development. •contributory participation in the student organization as a student and in professional/civic organization activities as an adult •display of appropriate conduct in all activities and events related to the student organization and professional/civic organizations

	Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.		• include contributory participation in activities such as meetings, fund-raising projects, school and community-service projects, and competitive events.
	Identify Internet safety issues and procedures for complying with acceptable use standards.		• include contributory participation in activities such as meetings, fund-raising projects, school and community-service projects, and competitive events.

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2nd Quarter (Second 4 ½ weeks) **Practicing Leadership Skills**	Explain classroom expectations.	• Why is it important for each student to know what the teacher expects from him or her during the school year? • What is the relationship between attendance and course success? • What are the safety expectations for the classroom and laboratory? • How can students show respect to classroom animals? Why is it important to respect classroom animals?	• include expectations involving class attendance, grading, laboratory procedures, daily class structure and preparation, respect for classroom animals and equipment, and other policies and procedures as presented in the teacher's guidelines.
	Identify essential traits of leadership.	• What are the traits of positive leadership? • How can leadership traits be developed? • Who are some effective leaders? • What are positive traits exhibited by those leaders?	• definitions of leader and leadership • explanation of the need for effective leadership in the field of agriculture • exploration of the positive traits of good leaders.
	Explain leadership principles.	• What are the principles of	• describe the

		positive leadership? • What are the benefits of practicing leadership principles?	characteristics of an effective leader and explore principles related to effective leadership.
	Explore opportunities for leadership.	• What leadership opportunities are offered by FFA? • How do leadership activities benefit FFA members?	• identification of opportunities for leadership in FFA and agriculture • examination of the ways of developing leadership skills in FFA and agriculture.
	Identify benefits and responsibilities of FFA membership.	• What are the benefits of being an FFA member? • What are the responsibilities of an FFA member?	• examination of the mission statement, aims and purposes, and code of ethics of the FFA • exploration of the FFA Student Handbook and Official FFA Manual for benefits and responsibilities.
	Identify duties of all officers in the FFA.	• What are the duties of FFA officers? • What are the FFA officers and their symbols? • What leadership development opportunities exist for officers?	• distinction between the various officers and their responsibilities in the FFA • exploration of the leadership development opportunities for FFA officers • examination of the various offices available at the chapter, state, and national levels.
	Participate in a committee meeting.	• What is the purpose of a committee? • How is a committee meeting conducted? • What are the twelve standing committees of an FFA organization?	• examination of the purpose of a committee and explanation of how a meeting should be conducted according to parliamentary procedure.
	Prepare and deliver an oral presentation or speech.	• What are the steps in preparing and delivering a speech? • What opportunities exist for public speaking in FFA? • What future opportunities exist	• explanation of the steps involved in speech preparation • explanation of the rules for FFA public speaking Career Development

		for public speaking?	Events • exploration of the impact of facial expressions and body language.
	Participate in a panel discussion.	• What is the purpose of a panel discussion? • How do you prepare for a panel discussion? • When is a panel discussion an effective means of discussion?	• examination of the purpose of a panel discussion • identification of the preparation requirements of a panel discussion.
	Write a news release.	• What are the steps and guidelines for writing an effective news release? • How can publishing news releases benefit an FFA chapter? • What information must be obtained in order to write an effective news release?	• examination of the elements of an effective news release • identification of the preparation and information required before writing a news release.
	Use parliamentary procedure.	• When is parliamentary procedure used within the community? • Why are the rules of parliamentary procedure followed? • What are the duties of the chairman of a meeting? • What are the different types of motions?	• determination of the importance of using parliamentary procedure • examination of the various motions and their significance • exploration of the opportunities available for use of parliamentary procedure • identification of the duties of the chair in a meeting.
	Complete an FFA award and/or officer application.	• What FFA awards are available for application? • What are the qualifications of the various FFA offices? • What are proficiency awards?	• identification of the FFA awards available • identification of the FFA offices • examination of the requirements for applying.
	List the purposes of the Virginia FFA Foundation.	• What is the purpose of the Virginia FFA Foundation?	• examination of the history of the Virginia

		• What opportunities are provided by the Foundation? • How can a local FFA chapter participate in the Virginia FFA Foundation?	FFA Foundation • identification of the benefits provided to FFA members from the Virginia FFA Foundation. • identification of the opportunities for Virginia FFA Foundation participation within the chapter.
Exploring Supervised Agricultural Experience	Explore the different types of Supervised Agricultural Experience (SAE) programs.	• What are the different types of SAE programs? • What awards are available for outstanding participation in the SAE programs? • What career skills can be obtained through SAE program participation?	Exploration of the different types of Supervised Agricultural Experience (SAE) programs should include • definitions of SAE and the types of SAE programs • determination of the purpose of SAE • determination of personal goals for SAE • plans of a personal SAE • exploration of the benefits of SAE.
	Develop a budget for SAE.	• What steps are followed in preparing a budget? • What is the purpose of a budget? • What are the consequences of not using a budget for SAE? • Why is the ability to develop and follow a budget an important life skill?	The development of a budget should include the steps in developing a budget and identifying the benefits of using a budget.
	Develop an annual plan for SAE based on personal goals.	• Why is a plan important for an SAE? • Who should be involved in SAE planning? • What should be contained in an annual plan?	The development of an annual plan for SAE based on personal goals should include • examination of the advantages of preparing an annual plan for SAE • identification of the items that should be included in an annual

			plan • identification of personal goals and goals for SAE • identification of people who should be involved in SAE planning.
	Develop record-keeping skills using the Virginia SAE record book.	• Why are record-keeping skills important? • What types of records should be kept? • What award opportunities exist for using the SAE record book?	The development of record-keeping skills using the Virginia SAE record book should include • examination of the importance of keeping records • identification of the various parts of the SAE record book • examination of the types of information that needs to be recorded • identification of FFA award opportunities related to SAE record keeping.
	Conduct an agricultural research SAE project.	• What opportunities exist for school-based research SAE projects? • What steps should be taken in conducting an SAE research project?	An SAE agricultural research project should include • identification of the components of a SAE agricultural research project • examination of the process involved in conducting research.

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3rd Quarter **(Third 4½ Weeks)** **Exploring the Pet Care Industry**	Describe opportunities in the pet care industry.	• What types of pet care jobs are available nationwide? How does Virginia compare with other states in the availability of pet care job opportunities? • What pet care jobs exist in your locality? Elsewhere in Virginia? • What career paths may a person pursue within the pet care industry?	Description should contain the possible careers and positions available in a variety of settings, to include pet shops, kennels, veterinary clinics, laboratories, zoos, pet grooming parlors, pet training schools, and entrepreneurial ventures such as a pet-sitting

			business.
	Describe the nature of the work and the salaries in small animal care.	• What resources are available to research occupations in small animal care? • How do the wages for small animal care occupations in Virginia compare with the national average? • What is the importance of English, mathematics, and science courses in preparing for a small animal care career?	Description should include an explanation of the duties associated with several different occupations, with the skills and education required and the wages paid for each occupation.
	Examine the role of pets with humans from a historical perspective.	• How has the role of pets evolved since prehistoric times? • How is the role of pets in American society similar and different from the role of pets in other parts of the world? • How are animals used to help people in therapeutic settings? • What is the difference between traditional pets and animals trained to assist people with health-related limitations (e.g., seeing eye dogs, helper monkeys)? What are the similarities?	Examination should include an analysis of the current role of pets in society and an explanation of how it has changed over time.
	Identify safety issues related to pet ownership.	• What types of diseases or other health-related problems can pets transmit to humans? How are they transmitted? • How can humans protect themselves from pet-transmitted diseases and other health conditions? • What groups are at a higher risk of disease as a result of having pets? Why? • What groups are at a higher risk of injuries as a result of having pets? Why?	Identification should include major precautions and procedures for safeguarding pets and owners from pet-related illnesses and injuries.
Caring for and Managing Rodents	Describe the specific physical characteristics and behavior of common pet rodents: mice, rats, gerbils, guinea pigs, and hamsters.	• How are hamsters and gerbils alike? How are they different? • What are the primary physical similarities and differences between domestic rats and domestic mice? • What are the common varieties of guinea pigs and the physical	Description should include size, colors, appearance, life span, and sleep habits of each pet rodent: • Mouse • Rat

		characteristics and behavior of each variety?	• Gerbil • Guinea pig • Hamster
	Describe general care, nutrition, housing, equipment, health, and breeding associated with common pet rodents.	• What considerations should be taken when handling mice? Rats? Guinea pigs? Gerbils? Hamsters? • In what ways are the nutritional needs of the five pet rodents similar? Different? • What are the most common types of diseases and other health problems of mice? Rats? Guinea pigs? Gerbils? Hamsters? How can these diseases and other health problems be prevented? How can they be treated? • What diseases and other health problems of rodent pets may be harmful to humans? What types of precautions are needed to prevent these problems from affecting humans?	Description should include general care, health, nutritional needs, necessary housing and equipment, sex determination, breeding techniques, and care for the young for each of the following: • Mouse • Rat • Guinea pig • Gerbil • Hamster
Caring for and Managing Birds	Identify common species of pet birds and their characteristics.	• What types of feathers do birds have? How is each type of feather important to a bird? • What are the most common subfamilies of birds? What characteristics do these subfamilies have in common? What characteristics differ from one subfamily to another? • How would a family determine which species of bird would make the best pet for them?	Identification should include common species of pet birds and the physical and behavioral characteristics of each.
	Describe general care, nutrition, health, housing, equipment, sexing, and breeding of common pet birds.	• What special care should be taken when choosing, placing, and equipping a cage for a parrot? How might the choice, placement, and/or equipment for a canary cage differ from those of a parrot? • What are the primary considerations when handling a pet bird? • How can parrots, mynah birds, cockatiels, and other so-called "talking birds" be trained to talk? • What are the most common	Description should include major considerations for general care, nutritional needs, health concerns, housing, equipment, sexing technique, and breeding of common pet birds.

		• parasites and diseases associated with pet birds? How can these be prevented? How are they treated? • What nutritional problems can occur in birds? What are the symptoms and treatments? • What can be done to alleviate problems posed by overgrown claws? By feather plucking?	
Caring for and Managing Fish	Describe the three categories of fish suitable for home aquariums.	• What are the dangers of adding too many fish all at once into a new aquarium? • Why is it important to know the feeding habits and other behavior of different fish types before putting the different types together into the same aquarium? • Why is it important to select the type(s) of fish you want prior to setting up and equipping the aquarium?	Description should include the major types of fish suitable for home aquariums with the characteristics of each (e.g., size, color, feeding habits, water level of habitat, other behavior).
	Care for fish and aquariums.	• What are the most common symptoms of disease in pet fish? Why is it important to act quickly to treat these symptoms? • Which parasites and bacterial diseases are common to most pet fish? Which are associated with one type of fish? How are these parasites and diseases treated? • How might the aquarium environment contribute to a fish's good health? To a fish's poor health? • Why are the following factors important when feeding pet fish: amount of food, frequency of meals, type of food (flakes vs. pellets, live vs. freeze-dried or frozen foods, meat vs. vegetable material)? • What are the primary differences between breeding egg-laying fish and breeding live-bearing fish?	Care should include setting up and maintaining an aquarium, feeding fish, breeding fish, and dealing with common fish ailments, based on industry practice as applicable.

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4th Quarter (Last 4½ Weeks) **Caring for and Managing Reptiles, Amphibians, and Specialized Animals**	Identify the general characteristics of common species of reptiles, amphibians, and other specialized animals of general interest.	• What physical characteristics do reptiles have in common? Why physical characteristics do amphibians have in common? In what ways do the physical characteristics of turtles, snakes, and lizards differ from each other? • How does the body types of turtles, snakes, and lizards affect their behavior? • Why do all reptiles shed their skin? • Why do indoor pet reptiles need to hibernate? How can the pet owner help the pet to hibernate successfully?	Identification should include the general characteristics of common species of reptiles, amphibians, and other animals of general interest (e.g., turtles, snakes, iguanas, lizards), to include size, feeding habits and other behaviors for each.
	Select and care for reptiles, amphibians, and other pets not previously studied.	• What factors must be considered to provide proper environmental conditions for a pet reptile or amphibian? Why are these so important to the animal? [Temperature, humidity, lighting, etc.] • How can a pet owner simulate a pet reptile's or amphibian's natural habitat? What housing and equipment can help recreate a terrestrial habitat? An arboreal habitat? An aquatic habitat? A semiaquatic habitat? • What types of food are needed by a pet reptile or amphibian on a daily basis? Why is each type important? • What are common signs of disease or other ailments in reptiles and/or amphibians? How are these health problems treated? • What precautions should owners and other handlers of pet reptiles or amphibians take to avoid health risks to humans? • Why is it important to check governmental regulations prior to purchasing or otherwise acquiring a reptile or amphibian as a pet?	Selection and care should include choosing reptiles, amphibians, and other pets; setting up quarters; caring for daily needs; breeding; and dealing with common ailments.
Grooming Animals	Fluff dry a dog and a cat.	• What are the similarities and	Animal should be completely dry, fluffy,

		differences between fluff drying a dog and a cat? • Is fluff drying appropriate for all dogs and cats? Why, or why not? • Why is proper fluff drying important? • What are other drying techniques besides fluff drying? In what situations are these other techniques used?	and brushed out, in accordance with industry standards .
	Prepare shampoos, creme rinses, and dips.	• What is the difference between a shampoo and a dip? Why is each important? • Why is it important to dilute shampoo according to label directions? • Why is it important that the diluted shampoo be properly labeled? • What is the procedure for mixing a shampoo that has a label reading "1:10 dilution"?	Shampoos, creme rinses, and dips should be prepared according to manufacturer's directions, following OSHA safety guidelines. All equipment and supplies must be returned to their proper places when complete.
	Bathe a dog or cat.	• What supplies and equipment are needed for bathing a dog or cat? • What basic steps should be taken when bathing a dog or cat? • What precautions should be taken when bathing a dog or cat? Why?	Bathing should include gathering supplies, preparing the bath area, bathing the animal, and cleaning the area after the bath.
	Apply dip.	• What are the functions of dip? • When applying dip, why must it saturate the animal's coat? • Why should dip not be rinsed off? • What precautions should be taken when applying dip to an animal?	Dip should be applied, according to manufacturer's specifications, to animal's coat starting at the nape of the neck and working back towards the tail. Dip should be applied to the animal's face with a sponge and should saturate the animal's coat. Dip should not be rinsed off.
	Trim dog, cat, and small animal nails.	• Why do animals have nails? • What are the signs that an animal's nails should be trimmed? • What precautions must be	Nails should be clipped as short as possible without cutting the quick. If the quick is cut, a coagulant should be applied until

		taken when trimming an animal's nails? Why? • What are the arguments for and against declawing a pet?	the bleeding has stopped. Nails with sharp edges after clipping should be filed. Owner and supervisor should be advised if nails have been quicked.
	Brush and dematt coat.	• What equipment is needed to brush and dematt an animal's coat? • Why is it important to brush and dematt pets? • Why should a pet's coat be brushed and dematted prior to bathing?	Coat should be brushed out from head to tail, following the lay of the coat. When brushing is completed, the coat should be free of matts and dead hair.
	Clean and pluck ears.	• What are the symptoms of common conditions and ailments that can affect an animal's ears? How are these ailments treated? • Why is it important to keep an animal's ears clean? • What animals may need to have their ears plucked? Why? • What precautions should be taken when cleaning and plucking an animal's ears? Why?	Ears should be clean and have no hair in the ear canal.
	Clip coat with electric clippers.	• What areas are shaved in a sanitary clip? • What is the reason for performing sanitary clips? • What can be done for an animal that has developed razor burn?	Clippers should be plugged in only when in use. Clippers should be used only in the direction of the lay of the hair (unless otherwise directed). Cooling lubricant should be used to keep blades from overheating. Blades should be put away after use. Pattern clips should be done according to breed or owner specifications. Sanitary clips should remove all hair around the genital and anal area of the dog and the armpits if necessary. Matts should be removed with clippers if matt cannot be combed out, removing minimal

			hair. Clippers should be used on cats only for matt removal and sanitary clips.
	Handle grooming tools.	• How might improper sanitizing lead to the spread of diseases or parasites? • What grooming tools can produce cuts on the pet? How can cuts be avoided? • How can using the wrong brush lead to an animal with brush burn?	Tools should be used in the manner specified by the teacher, never in a manner that would injure animal or student. Tools should be sanitized after every use and replaced in the proper area. Tool handling should be completed in accordance with manufacturer's guidelines and industry practice.
	Check for fleas.	• Why is it so important for pet owners to be educated about flea control? • Why are fleas dangerous to animals? To humans? • How do flea control products work? • How have flea control products evolved over the past 50 years?	Entire body of animal should be gone over with a flea comb. If fleas or flea dirt is found, animal should be given a flea bath and/or dip. If animal has already had a bath, use flea spray to kill any live fleas that are found. Procedures should be completed in accordance with industry practice.
	Remove ticks.	• Why is it important to wear gloves when removing a tick? • What is Lyme disease? Why is it dangerous? What precautions can be taken to avoid contracting it? • What should be done if the head of the tick remains in the skin when the rest of the tick is removed?	Cottonball with alcohol should be placed over the tick so that the tick removes its head from the skin. Tick should then be removed so that the head and body of the tick are intact. Tick should be placed in a "tick morgue" or a jar of dip or oil. The bite wound on the animal should be treated with antiseptic. Procedures should be completed in accordance with industry practice.
	Cage dry dog and cat.	• Under what circumstances would a small animal care professional cage dry an animal? • Why must animals being cage-dried be constantly monitored? What other precautions should be taken	Animal should be placed in a kennel of appropriate size with a bowl of water. Cage dryer should be turned on no higher than the medium setting, and animal should be checked

		when cage drying an animal?	every 10 minutes. Dryer should be turned off when animal is completely dry or if animal is showing signs of heat stress. Procedures should be completed in accordance with industry practice.
	Complete final comb-out.	• Why is it important to have a second party inspect the animal before it is discharged? • What is the purpose of the coat conditioner? • Why might a groomer choose to add a bow to the collar or a bandana to the neck of the pet being discharged?	At the conclusion of the grooming process and before the client arrives, the animal should be combed out and evaluated for completeness of the grooming process. Any stray hairs should be trimmed to fit the pattern. Coat conditioner should be sprayed on the animal and brushed in until dry. After final inspection by the teacher, the animal may be returned to its cage. Procedures should be completed in accordance with industry practice.
Handling Animals	Restrain animals for treatment.	• How should a handler hold a cat so that blood can be obtained from the jugular vein? • How is restraining a cat for an injection different from restraining a dog? • Why do leather gloves often make it more difficult to restrain a small mammal? • What is a rodent restraint tunnel? • What is the "burrito" method of restraint? What are its advantages and disadvantages? • Why is understanding the proper use of restraint equipment important in protecting the safety of the handler and the animal? • How do restraint techniques differ depending on avian species? How do restraint techniques differ depending on which vessel will be used for blood collection? • Why should the handler take	Restraint should be based on size, breed, and treatment needed.

		care not to apply pressure to the sternum of the bird? • What cautions should a handler take when restraining a turtle or tortoise for venipuncture/injection? Why? • What cautions should a handler take when restraining a snake for venipuncture/injection? Why? • Why is it especially important to wash one's hands prior to handling snakes?	
	Lift and carry animals.	• In what types of situations might a small animal professional need to lift and carry a large dog? • How does a small animal professional determine whether a second person is needed to help with the lifting and transporting of a large dog? • How does a small animal professional determine whether a muzzle or head snare is appropriate when lifting and carrying a large dog? • Why is it important to secure the front legs while carrying a cat? • How can the handler tell that his or her hand is positioned properly on the scruff? • What are the dangers associated with carrying a cat? • Why is it advised to carry a cat in a carrier when transporting the cat out of the home? • How can a dog be injured if it is carried incorrectly? • Why is it important to maintain control of the dog's head when lifting the animal? • How might lifting a puppy be different from lifting an adult dog? • What considerations should a handler take when lifting a geriatric dog? • What defense mechanisms employed by various species of reptile could cause injury to the handler? • Why should turtles not be	Procedures should include explanation and application of the principles involved in the lifting and carrying of various animals, based on industry practice and teacher's guidelines.

		turned over from side to side (versus end over end) during restraint/handling? • Why should more than one handler carry large snakes? • What are commonly used techniques for carrying various species of birds? • What defense mechanisms employed by the various avian species could cause injury to the handler?	
	Manage a quarantined animal.	• In what types of situations might it be necessary to quarantine an animal? • What types of equipment and conditions are necessary to quarantine an animal? • What types of safety precautions must be taken when quarantining an animal? Why?	Management should include explaining the purposes, equipment, and safety measures involved in quarantining an animal. Procedures should be completed in accordance with industry practice.
	Exercise animal.	• Why is exercise important to an animal? • What factors affect the types and amount of exercise an animal needs? • How do equipment and space needs differ when planning for exercise of different breeds of animal? • Under what circumstances can an animal get too much exercise? Under what circumstances should an animal not be exercised at all? • What important observations about the dog's urine, feces, or behavior can the exerciser make while exercising the animal?	Provision of exercise should include identification of differences in exercising for animals according to age, breed, and condition, as well as various exercise techniques, according to industry practice.
Performing Technical Functions	Weigh and measure animals.	• When would one use a tabletop scale as opposed to a floor scale to weigh an animal? • How can one determine the weight of a difficult cat that cannot be removed from its carrier? • In what situations is it important to measure the height/length of an animal?	Process should include explaining reasons and techniques for weighing and measuring a variety of animals. Weighing an animal should include • identifying the type of weight system (e.g., metric, avoirdupois)

			and scale needed • transporting the animal to and from the scale using techniques appropriate for the animal • placing the animal on the scale • reading the scale and recording the weight correctly. Measuring the height/length of an animal should include • demonstrating the correct procedures for obtaining the height and length of an animal • identifying the appropriate type of measurement system (e.g., metric, avoirdupois) and tool needed • restraining the animal, using techniques appropriate for the species/breed • reading the measurement and recording the height/length correctly.
		• In what situations are at least two people needed to measure the height/length of an animal? • In what situations is assistive technology (beyond the measuring device) necessary to measure an animal?	
	Observe animals for abnormalities.	• What possible abnormalities could be present with an animal that is urinating more frequently and/or is straining to urinate? • What is lethargy? What medical problems can it indicate? • What are some possible causes for an increase in appetite and/or water intake? A decrease?	Observation for abnormalities should include factors such as attitude, physical state, and food/water intake, as well as feces and urine.
	Take and evaluate vital signs.	• Where is the best place to get the pulse of a dog? Of a cat? • What is a normal heart rate of a small dog? Of a large dog? Of an adult cat?	Procedure should consist of measuring and recording vital signs (including temperature, pulse, respiration) and

		• Why is it important to check for vital signs prior to administering vaccines?	explaining the significance of the recorded signs. Demonstration should include • identifying the vital signs that should be measured • selecting the appropriate devices for measuring • handling the animal appropriately to obtain the measurement • following standard procedures for obtaining the vital signs of an animal • recording the signs on the animal's chart or other record.
	Collect and prepare fecal samples.	• Why should a fecal sample be refrigerated or placed in an appropriate solution if it is not going to be analyzed at once? • What is a fecal loop? Why is it preferred to obtain a fecal sample with a fecal loop rather than collecting it from the ground? What are some disadvantages of using a fecal loop? • What are potential health risks for humans handling fecal samples of animals? How can these risks be minimized?	Collecting and preparing a fecal sample should include • obtaining the feces from the ground or litter pan, or by inserting a lubricated loop or gloved finger into the rectum • placing the fecal sample in a zip bag or other sealed container • labeling sample container • refrigerating sample or placing it in a solution, if there is a delay before parasite analysis will occur • adhering to standard safety and aseptic procedures.
	Record performance of daily animal care duties.	• Why do animal caretakers and medical professionals keep records in regard to animal care? • What is the importance of the caretaker putting his or her name or initials on the	Procedure should include • recording and initialing the duties performed in daily upkeep of animals, including time of

		records?	performance, and other pertinent data, in accordance with teacher's guidelines • explaining the importance of documenting daily animal care duties.
	Administer medications and basic first aid.	• What can be done to encourage a dog or cat that is holding a pill in its mouth to swallow the pill? • What problems could arise from trying to hide a medication in food? • How is it possible to get a thick topical medication out of a jar without contaminating the contents of the jar? • What problems arise when applying topical medications to an area the animal can reach by grooming itself? What could be done to prevent these problems? • What is triage? • Prior to administering first aid, what should be the first thing the caregiver does when assessing an animal's condition? • How does one differentiate between arterial and venous bleeding? • Why could an injury in a very young animal be a higher priority than the same injury in an adult animal? • What are the ABCs of initial care? What could happen if the caregiver stopped to perform first aid on a fractured limb before checking the ABCs on the patient? • What could swollen or cold toes on a bandaged limb indicate? • Why is washing or irrigating a wound to remove debris important? What should not be used to wash or irrigate an open wound? • What is the purpose of the primary layer of a bandage? Secondary layer? Tertiary layer?	Procedure should include administration of medications and basic first aid, according to health professional standards and teacher's guidelines. Administering basic oral and topical medications should include the actions below: • following all directions provided by the prescription label or the prescribing veterinarian, and rechecking drug labels prior to administering any drug to an animal • demonstrating firm but gentle restraint as necessary to perform the task • administering oral medication in pill or capsule form by "pilling" both dogs and cats, using their fingers or a "pet piller", without the animal spitting the medication back out • administering an oral dose of liquid medication to both dogs and cats, using a dosing syringe, without the animal spitting part or all of the dose out • successfully instilling ointments, solutions, and other topical forms of medication into a dog/cat's ears,

			eyes, and on the skin without part or all of the medication not being delivered to the site • applying topical medications from multiple use droppers, tubes, jars, and other containers in an aseptic manner without contaminating contents of container Performing correct first aid procedures for the most common emergencies should include the following: • identifying those situations requiring basic first aid versus true emergencies, and describing the signs they might see in the patient • assessing a patient's condition based on signs as well as other factors (e.g., patient's age, weight) • demonstrating the ability to "see the big picture" when assessing a patient, and not focusing on the most obvious injury (which might cause the caregiver to overlook a more serious situation that could result in a worsening of the injury or in death) • prioritizing common emergencies (e.g., bleeding, diarrhea, shock, burns, poisonings, insect stings, choking), and performing necessary first aid as required by the patient • demonstrating proper wound care and bandaging techniques, including irrigating or washing wound to remove

			debris, applying direct pressure to stop bleeding, applying a temporary bandage to hold a dressing in place until wound can be evaluated by a veterinarian • using animal restraint techniques (e.g., muzzling), as appropriate for the situation and the animal's condition
	Construct and maintain animal housing.	• What are the basic functions of animal housing? • How can commercial or handmade housing simulate an animal's environment? • What types of housing materials are appropriate for various breeds of animals? Why? • Why is regular maintenance of animal housing important?	Process should include building and maintaining animal quarters for a variety of animal breeds in accordance with industry practice and should incorporate • identifying the basic functions of animal housing • identifying the basic materials of animal housing, according to breed • constructing a house for an animal • identifying the responsibilities involved in housing maintenance, including sanitation • maintaining animal housing.
	Clean and disinfect animal's quarters.	• Why is it important to clean and disinfect a kennel after each use? • Why should dogs not be put in "used" kennels? • What is the benefit of placing newspaper at the bottom of the kennel? • What are some potential health hazards for the human cleaner of animal quarters? How can they be avoided?	Cleaning and disinfecting animal kennels should include wearing gloves, selecting the appropriate products, following standard procedures for cleaning and disinfecting, and ensuring the cleaning of all surfaces (top, bottom, front, sides, and back).

	Maintain water needs of small animals.	- How long can animals live without water? Why is water so important to animals? - What safety precautions for the animal are involved in water maintenance? What are safety precautions for the human caretaker? - What are the symptoms of dehydration in an animal? What should be done if an animal shows signs of dehydration?	Maintenance should include explanation of water needs, safety precautions, and techniques involved in water maintenance for a variety of animals.