			Small Animal Pet Care Grades 9-12 **Unit #1**
Course/Subject: Small Animal Pet Care/ Agriculture	**Grade:** 9-12	**Introduction to Small Animal Pet Care**	**Suggested Timeline:** 1 week

Grade Level Summary	Today, the pet industry is growing large and growing. This course will focus on the science behind the care and management of companion animals. Small and companion animals such as dogs, cats, rabbits, rodents, reptiles, amphibians, fish, birds, and other exotic species will be studied. Basic anatomy, reproduction, nutrition, health care, and related careers will be examined throughout the course for each species. Common diseases and conditions will also be studied through lab exercises and projects, which may include dissections, injections, surgical procedures and basic first-aid. All students are FFA members through this course.	
Grade Level Units	Unit 1: Introduction to Small Animal Pet Care Unit 2: Safety Unit 3: Nutrition and Digestive Systems Unit 4: Careers in Small Animal Care Unit 5: Dogs Unit 6: Cats	Unit 7: Rabbits Unit 8: Rodents as Pets Unit 9: Guinea Pigs, Chinchillas, and Ferrets Unit 10: Amphibians and Reptiles Unit 11: Birds Unit 12: Fish

Unit Title	Introduction to Small Animal Pet Care
Unit Summary	Students will learn the history of animals on earth. Students will learn how animals evolved and how they became domesticated. Students will learn the importance of the small animal industry.

Unit Essential Questions: 1. How are major animal species organized into classifications? 2. How have humans domesticated animals over time?	**Key Understandings:** 1. History of animals on earth. 2. Evolution of animals 3. Domestication of animals 4. Classifications of organisms

Focus Standards Addressed in the Unit:

Standard Number	*Standard Description*
AS.01.01.01a	Identify the origin, significance, distribution and domestication of animal species.
AS.01.01.01.b.	Evaluate and describe characteristics of animals that developed in response to the animals' environment and led to their domestication
AS.02.01.01.a.	Explain the importance of the binomial system of nomenclature.
AS.02.01.02.a.	Identify major animal species by common and scientific names.

Important Standards Addressed in the Unit:

AS.02.01.01.c.	Classify animals according to the taxonomical classification system.

Misconceptions:	**Proper Conceptions:**
1. Almost every household has a pet.	1. Less than 60% of households have pets.

Knowledge & Concepts	Skills & Competencies	Dispositions & Practices
● History of animals on Earth ● Domestication of Animals ● Importance of the Small Animal Industry	● Classification of Organisms	● Learning to Learn

Academic Vocabulary:

● Animalia	● Monera	● Reptilia
● Aves	● Notochord	● Taxa
● Binomial nomenclature	● Osteichthyes	● Taxonomy
● Chordata	● Pharyngeal	● Trinomial nomenclature
● Fungi	● Placental mammals	● Vertebrate
● Invertebrates	● Plantae	
● Mammalia	● Protista	

Assessments:

- Quizzes
- Test
- Projects
- Class participation and practices
- Small Animal Room Participation

Differentiation:

- Book work
- Lecture
- Demonstrations
- Video clips
- Hands on learning
- IEP accommodations

Interdisciplinary Connections:

- English
- Science

Additional Resources:

- *Small Animal Care and Management 2nd Edition* by Dean M. Warren
- Power Points
- Note packets
- Small Animal Room

Created By: Meagan Smyers

			Small Animal Pet Care **Grades 9-12** **Unit #2**
Course/Subject: Small Animal Pet Care/ Agriculture	**Grade:** 9-12	**Safety**	**Suggested Timeline:** 1 week

Grade Level Summary	Today, the pet industry is growing large and growing. This course will focus on the science behind the care and management of companion animals. Small and companion animals such as dogs, cats, rabbits, rodents, reptiles, amphibians, fish, birds, and other exotic species will be studied. Basic anatomy, reproduction, nutrition, health care, and related careers will be examined throughout the course for each species. Common diseases and conditions will also be studied through lab exercises and projects, which may include dissections, injections, surgical procedures and basic first-aid. All students are FFA members through this course.	
Grade Level Units	Unit 1: Introduction to Small Animal Pet Care Unit 2: Safety Unit 3: Nutrition and Digestive Systems Unit 4: Careers in Small Animal Care Unit 5: Dogs Unit 6: Cats	Unit 7: Rabbits Unit 8: Rodents as Pets Unit 9: Guinea Pigs, Chinchillas, and Ferrets Unit 10: Amphibians and Reptiles Unit 11: Birds Unit 12: Fish

Unit Title	Safety
Unit Summary	Students will be able to explain the importance of safety when working and playing with animals. Students will learn about diseases that can be transmitted from animals to humans and how to prevent this occurrence. Students will learn proper restraint and handling procedures for both animals and chemicals.

Unit Essential Questions:	**Key Understandings:**
1. What are common diseases, parasites, and disorders that affect animals? 2. How can preventative measure, proper care, and safe handling decrease risk and limit spread of diseases, parasites and disorders?	1. Diseases that can be transmitted from animals to humans 2. Preventing infection 3. Restraint procedures 4. Safety when handling dangerous chemicals 5. Safety when working and playing with animals

Focus Standards Addressed in the Unit:

Standard Number	*Standard Description*
AS.03.01.02.a.	Identify common diseases, parasites and physiological disorders that affect animals.
AS.03.01.03.a.	Explain characteristics of causative agents and vectors of diseases and disorders in animals.
AS.03.01.03.b.	Evaluate preventive measures for controlling and limiting the spread of diseases, parasites and disorders among animals.
AS.03.01.05.a.	Identify and describe zoonotic diseases.

Important Standards Addressed in the Unit:	
AS.03.01.05.c.	Implement zoonotic disease prevention methods and procedures for the safe handling and treatment of animals.

Misconceptions:	Proper Conceptions:
1. You cannot catch diseases from animals. 2. You can wash your work/animal lab clothes with your regular clothing.	1. There are several diseases that can be transmitted from animals to humans. 2. Clothing that has been exposed to chemicals or sick animals should be wash separately and according to recommended cleaning methods.

Knowledge & Concepts	Skills & Competencies	Dispositions & Practices
● Zoonotic Diseases ● Disease prevention ● Safe handling guidelines of chemicals	● Use of Personal Protective Equipment ● Restraint Techniques	● Responsibility

Academic Vocabulary:

● Evulsions	● Intradermal	● Reservoir
● Immune gamma globulin	● Intramuscular	● Sustenance
● Intermediate hosts	● Parasites	● Zoonoses

Assessments:

- Quizzes
- Test
- Projects
- Class participation and practices
- Small Animal Room Participation

Differentiation:

- Book work
- Lecture
- Demonstrations
- Video clips
- Hands on learning
- IEP accommodations

Interdisciplinary Connections:

- English- technical reading

Additional Resources:

- *Small Animal Care and Management 2nd Edition* by Dean M. Warren
- Power Points
- Note packets
- Small Animal Room

Created By: Meagan Smyers

			Small Animal Pet Care Grades 9-12 **Unit #3**
Course/Subject: Small Animal Pet Care/ Agriculture	**Grade:** 9-12	**Nutrition and Digestive Systems**	**Suggested Timeline:** 2 week

Grade Level Summary	Today, the pet industry is growing large and growing. This course will focus on the science behind the care and management of companion animals. Small and companion animals such as dogs, cats, rabbits, rodents, reptiles, amphibians, fish, birds, and other exotic species will be studied. Basic anatomy, reproduction, nutrition, health care, and related careers will be examined throughout the course for each species. Common diseases and conditions will also be studied through lab exercises and projects, which may include dissections, injections, surgical procedures and basic first-aid. All students are FFA members through this course.	
Grade Level Units	Unit 1: Introduction to Small Animal Pet Care Unit 2: Safety Unit 3: Nutrition and Digestive Systems Unit 4: Careers in Small Animal Care Unit 5: Dogs Unit 6: Cats	Unit 7: Rabbits Unit 8: Rodents as Pets Unit 9: Guinea Pigs, Chinchillas, and Ferrets Unit 10: Amphibians and Reptiles Unit 11: Birds Unit 12: Fish

Unit Title	Nutrition and Digestive Systems
Unit Summary	Students will learn about different types of digestive systems and how the nutritional requirements are different for those systems. Students will learn about the basic nutrient groups.

Unit Essential Questions: 1. What are the major components of animal diets? 2. What are the general principles in animal nutrition? 3. How do you create a complete and balanced diet for different animal species?	**Key Understandings:** 1. Nutrient Groups 2. Ruminant and Non Ruminant Digestive systems 3. Animals Feeds 4. Nutrition Requirements

Focus Standards Addressed in the Unit:	
Standard Number	*Standard Description*
AS.04.01.01.a.	Compare and contrast common types of feedstuffs and the roles they play in the diets of animals.
AS.04.01.01.b.	Determine the relative nutritional value of feedstuffs by evaluating their general quality and condition.
AS.04.01.01.c.	Select appropriate feedstuffs for animals based on factors such as economics, digestive system and nutritional needs.
AS.04.01.02.a.	Explain the importance of a balanced ration for animals.

Important Standards Addressed in the Unit:

AS.02.02.01.b.	Compare and contrast animal cells, tissues, organs and body systems.
AS.04.01.02.c.	Formulate animal feeds based on nutritional requirements, using feed ingredients for maximum nutrition and optimal economic production.

Misconceptions:	**Proper Conceptions:**
1. Quantity is more important than quality. 2. Diet requirements do not change.	1. Quality of feed is more important than quantity. 2. Diet requirements can range greatly per individual animals.

Knowledge & Concepts	Skills & Competencies	Dispositions & Practices
● Nutrient Groups ● Differences in digestive systems ● Importance of a balanced ration.	● Develop a feed ration ● Calculate proper ratios in feed stuffs	● Learning to Learn

Academic Vocabulary:

● Absorption	● Enzymes	● Nutrient
● Amino acid	● Hemoglobin	● Nutrition
● Antibodies	● Hormones	● pH
● Assimilation	● Macrominerals	● Respiration
● Biochemical reaction	● Microminerals	● Ruminant animals
● Coprophagy	● Nitrogen-free extract	● Solubility
● Digestion	● Nonruminant animals	● Ventriculus
● DNA		

Assessments:

- Quizzes
- Test
- Projects
- Class participation and practices
- Small Animal Room Participation

Differentiation:

- Book work
- Lecture
- Demonstrations
- Video clips
- Hands on learning
- IEP accommodations

Interdisciplinary Connections:

- Science- anatomy, nutrition

Additional Resources:

- *Small Animal Care and Management 2nd Edition* by Dean M. Warren
- Power Points
- Note packets

- Small Animal Room

Created By: Meagan Smyers

			Small Animal Pet Care **Grades 9-12** **Unit #4**
Course/Subject: Small Animal Pet Care/ Agriculture	**Grade:** 9-12	**Careers in Small Animal Care**	**Suggested Timeline:** 2 weeks

Grade Level Summary	Today, the pet industry is growing large and growing. This course will focus on the science behind the care and management of companion animals. Small and companion animals such as dogs, cats, rabbits, rodents, reptiles, amphibians, fish, birds, and other exotic species will be studied. Basic anatomy, reproduction, nutrition, health care, and related careers will be examined throughout the course for each species. Common diseases and conditions will also be studied through lab exercises and projects, which may include dissections, injections, surgical procedures and basic first-aid. All students are FFA members through this course.	
Grade Level Units	Unit 1: Introduction to Small Animal Pet Care Unit 2: Safety Unit 3: Nutrition and Digestive Systems Unit 4: Careers in Small Animal Care Unit 5: Dogs Unit 6: Cats	Unit 7: Rabbits Unit 8: Rodents as Pets Unit 9: Guinea Pigs, Chinchillas, and Ferrets Unit 10: Amphibians and Reptiles Unit 11: Birds Unit 12: Fish

Unit Title	Careers in Small Animal Care
Unit Summary	Students will explore various career options in the small animal field. Students will learn about employability skills and job readiness skills. Students will learn the nature of work, requirements, and how to obtain job in a variety of jobs.

Unit Essential Questions: 1. What soft skills or social skills are required to be successful in this agricultural career strand? 2. What career opportunities exist in animal science? 3. What advanced training and/or postsecondary education options exists within the career field?	**Key Understandings:** 1. Animal Science Career Exploration 2. Employability Skills

Focus Standards Addressed in the Unit:	
Standard Number	*Standard Description*
CRP.10.01.	Identify career opportunities within a career cluster that match personal interests, talents, goals and preferences.
CRP.10.02.	Examine career advancement requirements (e.g., education, certification, training, etc.) and create goals for continuous growth in a chosen career.
CRP.10.03.	Develop relationships with and assimilate input and/or advice from experts (e.g., counselors, mentors, etc.) to plan career and personal goals in a chosen career area.
CRP.10.04.	Identify, prepare, update and improve the tools and skills necessary to pursue a chosen career path.

Important Standards Addressed in the Unit:	
CRP.04.	Communicate clearly, effectively and with reason.
CRP.07.	Employ valid and reliable research strategies.

Misconceptions:	Proper Conceptions:
1. If you want to work with animals you must become a veterinarian or a veterinarian technician.	1. There are a wide range of jobs available in the animal industry that do not include working in a veterinary practice.

Knowledge & Concepts	Skills & Competencies	Dispositions & Practices
● Opportunities in the small animal career field. ● Salaries, nature of work, and requirements to obtain specific jobs.	● Job Skills ● Employability Skills	● Responsibility

Academic Vocabulary:

● Anatomists	● Geneticists	● Pharmacologists
● Animal trainers	● Laboratory animal care worker	● Physiologists
● Biochemists	● Laboratory animal technicians	● Small animal breeders
● Biologists	● Laboratory animal technologists	● Veterinarians
● Biophysicists	● Nutritionists	● Veterinary technicians
● Botanists	● Pathologists	● Zoo administrators
● Ecologists	● Pet care worker	● zoologists
● Embryologists	● Pet groomer	

Assessments:

- Quizzes
- Test
- Projects
- Class participation and practices
- Small Animal Room Participation

Differentiation:

- Book work
- Lecture
- Demonstrations
- Video clips
- Hands on learning
- IEP accommodations

Interdisciplinary Connections:

- English

Additional Resources:

- *Small Animal Care and Management 2nd Edition* by Dean M. Warren
- Power Points
- Note packets
- Small Animal Room

Created By: Meagan Smyers

			Small Animal Pet Care **Grades 9-12** **Unit #5**
Course/Subject: Small Animal Pet Care/ Agriculture	**Grade:** 9-12	**Dogs**	**Suggested Timeline:** 2 weeks

Grade Level Summary	Today, the pet industry is growing large and growing. This course will focus on the science behind the care and management of companion animals. Small and companion animals such as dogs, cats, rabbits, rodents, reptiles, amphibians, fish, birds, and other exotic species will be studied. Basic anatomy, reproduction, nutrition, health care, and related careers will be examined throughout the course for each species. Common diseases and conditions will also be studied through lab exercises and projects, which may include dissections, injections, surgical procedures and basic first-aid. All students are FFA members through this course.	
Grade Level Units	Unit 1: Introduction to Small Animal Pet Care Unit 2: Safety Unit 3: Nutrition and Digestive Systems Unit 4: Careers in Small Animal Care Unit 5: Dogs Unit 6: Cats	Unit 7: Rabbits Unit 8: Rodents as Pets Unit 9: Guinea Pigs, Chinchillas, and Ferrets Unit 10: Amphibians and Reptiles Unit 11: Birds Unit 12: Fish

Unit Title	Dogs
Unit Summary	Students will learn how dogs evolved through history and became domesticated. Students will learn the different dog groups and the breeds in those groups. Students will learn how to properly care for, groom, handle, and feed dogs

Unit Essential Questions:	**Key Understandings:**
1. What types of animal facilities are necessary when raising animals? 2. What are proper disposal methods for animal waste? 3. How do you prevent diseases in animals? 4. What are the common vaccines used in disease prevention? 5. What are the different breeds of dogs? 6. How do you select/judge dogs? 7. How do you feed and manage a dog?	1. History of the dog 2. Groups of Dogs 3. Proper feeding and exercising 4. Training methods 5. Grooming and health care 6. Diseases of dogs

Focus Standards Addressed in the Unit:

Standard Number	*Standard Description*
AS.01.	Analyze historic and current trends impacting the animal systems industry.
AS.02.	Utilize best-practice protocols based upon animal behaviors for animal husbandry and welfare.
AS.03.	Design and provide proper animal nutrition to achieve desired outcomes for performance, development, reproduction and/or economic production.

AS.04.	Apply principles of animal reproduction to achieve desired outcomes for performance, development and/or economic production.

Important Standards Addressed in the Unit:	
AS.05.	Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.
AS.06.	Classify, evaluate and select animals based on anatomical and physiological characteristics.
AS.07.	Apply principles of effective animal health care.
AS.08.	Analyze environmental factors associated with animal production.

Misconceptions:	**Proper Conceptions:**
1. Dogs eat grass when they are sick. 2. You can't teach an old dog new tricks.	1. Some dogs like to eat grass. It indicates nothing. 2. Dogs can learn at any age.

Knowledge & Concepts	**Skills & Competencies**	**Dispositions & Practices**
● History of dogs. ● Breeds of dogs. ● Health and grooming of dogs ● Diseases and ailments of dogs.	● Restraint techniques ● Grooming techniques ● Handling techniques ● Training tips	● Ethical Judgment ● Critical Thinking

Academic Vocabulary:

● Anemia ● Colostrum ● Conformation ● Congenital	● Estrus ● Gestation ● Heat Period ● Pedigree	● Placental Membrane ● Proestrus ● Rodenticide ● Styptic

Assessments:

- Quizzes
- Test
- Projects
- Class participation and practices
- Small Animal Room Participation

Differentiation:

- Book work
- Lecture
- Demonstrations
- Video clips
- Hands on learning
- IEP accommodations

Interdisciplinary Connections:

- English- Technical reading
- Science/Health- nutrition

Additional Resources:

- *Small Animal Care and Management 2nd Edition* by Dean M. Warren
- Power Points
- Note packets
- Small Animal Room

Created By: Meagan Smyers

			Small Animal Pet Care **Grades 9-12** **Unit #6**
Course/Subject: Small Animal Pet Care/ Agriculture	**Grade:** 9-12	**Cats**	**Suggested Timeline:** 2 weeks

Grade Level Summary	Today, the pet industry is growing large and growing. This course will focus on the science behind the care and management of companion animals. Small and companion animals such as dogs, cats, rabbits, rodents, reptiles, amphibians, fish, birds, and other exotic species will be studied. Basic anatomy, reproduction, nutrition, health care, and related careers will be examined throughout the course for each species. Common diseases and conditions will also be studied through lab exercises and projects, which may include dissections, injections, surgical procedures and basic first-aid. All students are FFA members through this course.	
Grade Level Units	Unit 1: Introduction to Small Animal Pet Care Unit 2: Safety Unit 3: Nutrition and Digestive Systems Unit 4: Careers in Small Animal Care Unit 5: Dogs Unit 6: Cats	Unit 7: Rabbits Unit 8: Rodents as Pets Unit 9: Guinea Pigs, Chinchillas, and Ferrets Unit 10: Amphibians and Reptiles Unit 11: Birds Unit 12: Fish

Unit Title	Cats
Unit Summary	Students will learn about the history of cats and how they became domesticated. Students will learn about the different groupings of cats and the breeds in those groups. Students will learn the proper care and management of felines along with common diseases and ailments.

Unit Essential Questions: 1. What types of animal facilities are necessary when raising animals? 2. What are proper disposal methods for animal waste? 3. How do you prevent diseases in animals? 4. What are the common vaccines used in disease prevention? 5. What are the different breeds of cats? 6. How do you select/judge cats? 7. How do you feed and manage a cat?	**Key Understandings:** 1. History of cats 2. Groups and breeds 3. Methods of feeding 4. Grooming and Health care 5. Diseases

Focus Standards Addressed in the Unit:

Standard Number	*Standard Description*
AS.01.	Analyze historic and current trends impacting the animal systems industry.
AS.02.	Utilize best-practice protocols based upon animal behaviors for animal husbandry and welfare.
AS.03.	Design and provide proper animal nutrition to achieve desired outcomes for performance, development, reproduction and/or economic production.

AS.04.	Apply principles of animal reproduction to achieve desired outcomes for performance, development and/or economic production.

Important Standards Addressed in the Unit:	
AS.05.	Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.
AS.06.	Classify, evaluate and select animals based on anatomical and physiological characteristics.
AS.07.	Apply principles of effective animal health care.
AS.08.	Analyze environmental factors associated with animal production.

Misconceptions:	**Proper Conceptions:**
1. Declawing a cat is like trimming their nails. 2. Cats like human interaction and like to socialize with other animals.	1. Declawing a cat is like removing fingers. 2. Cats are solitary animals.

Knowledge & Concepts	**Skills & Competencies**	**Dispositions & Practices**
● History of cats. ● Breeds of cats. ● Housing and equipment of cats. ● Diseases and ailments of cats.	● Handling of cats. ● Grooming of cats.	● Ethical Judgment ● Critical Thinking

Academic Vocabulary:

● Agouti ● Cochlea ● Colorpoint ● Conjunctivitis ● Coronavirus	● Feral ● Jacobson's Organ ● Jaundice ● Keratitis ● Nictitating Membrane	● Occlusion ● Olfactory Mucosa ● Papillae ● Points

Assessments:

- Quizzes
- Test
- Projects
- Class participation and practices
- Small Animal Room Participation

Differentiation:

- Book work
- Lecture
- Demonstrations
- Video clips
- Hands on learning
- IEP accommodations

Interdisciplinary Connections:

- English- technical reading.

Additional Resources:

- *Small Animal Care and Management 2nd Edition* by Dean M. Warren
- Power Points
- Note packets
- Small Animal Room

Created By: Meagan Smyers

			Small Animal Pet Care **Grades 9-12** **Unit #7**
Course/Subject: Small Animal Pet Care/ Agriculture	**Grade:** 9-12	**Rabbits**	**Suggested Timeline:** 2 weeks

Grade Level Summary	Today, the pet industry is growing large and growing. This course will focus on the science behind the care and management of companion animals. Small and companion animals such as dogs, cats, rabbits, rodents, reptiles, amphibians, fish, birds, and other exotic species will be studied. Basic anatomy, reproduction, nutrition, health care, and related careers will be examined throughout the course for each species. Common diseases and conditions will also be studied through lab exercises and projects, which may include dissections, injections, surgical procedures and basic first-aid. All students are FFA members through this course.	
Grade Level Units	Unit 1: Introduction to Small Animal Pet Care Unit 2: Safety Unit 3: Nutrition and Digestive Systems Unit 4: Careers in Small Animal Care Unit 5: Dogs Unit 6: Cats	Unit 7: Rabbits Unit 8: Rodents as Pets Unit 9: Guinea Pigs, Chinchillas, and Ferrets Unit 10: Amphibians and Reptiles Unit 11: Birds Unit 12: Fish

Unit Title	Rabbits
Unit Summary	Students will gain hands on experience during this unit by caring for the Ag Department's resident rabbits. Students will learn about breeding, care, management, grooming, feeding, and handling various breeds of rabbits. Students will also learn history and weight classes of rabbits.

Unit Essential Questions:	**Key Understandings:**
1. What types of animal facilities are necessary when raising animals? 2. What are proper disposal methods for animal waste? How do you prevent diseases in animals? 3. What are the common vaccines used in disease prevention? 4. What are the different breeds of rabbits? 5. How do you select/judge rabbits? 6. How do you feed and manage a rabbit? 7. What is the reproductive cycle of rabbits?	1. History 2. Uses 3. Weight Classes 4. Breeds 5. Housing and Equipment 6. Management 7. Nutrient Requirements 8. Diseases

Focus Standards Addressed in the Unit:	
Standard Number	*Standard Description*
AS.01.	Analyze historic and current trends impacting the animal systems industry.
AS.02.	Utilize best-practice protocols based upon animal behaviors for animal husbandry and welfare.
AS.03.	Design and provide proper animal nutrition to achieve desired outcomes for performance, development, reproduction and/or economic production.
AS.04.	Apply principles of animal reproduction to achieve desired outcomes for performance, development and/or economic production.

Important Standards Addressed in the Unit:	
AS.05.	Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.
AS.06.	Classify, evaluate and select animals based on anatomical and physiological characteristics.
AS.07.	Apply principles of effective animal health care.
AS.08.	Analyze environmental factors associated with animal production.

Misconceptions:	Proper Conceptions:
1. Rabbits can be picked up by their ears. 2. Rabbits eat carrots. 3. Rabbits are rodents.	1. Rabbits should never be picked up by their ears. 2. Rabbit's diets should consist of 80% hay and grass. Carrots are high in sugar and should be limited. 3. Rabbits are lagomorphs.

Knowledge & Concepts	Skills & Competencies	Dispositions & Practices
● History of rabbits. ● Breeds of rabbits. ● Housing and equipment of rabbits. ● Diseases and ailments of rabbits.	● Proper handling, care, and feeding of rabbits. ● Grooming/ nail trimming ● Restraining techniques.	● Ethical Judgment ● Critical Thinking

Academic Vocabulary:

● Conjunctiva	● Enteritis	● Oocysts
● Coprophagy	● Fly-back fur	● Roll-back fur
● Dew-drop valve	● Kindling	● Sore Hocks
● Dewlap	● Malocclusion	

Assessments:

- Quizzes
- Test
- Projects
- Class participation and practices
- Small Animal Room Participation

Differentiation:

- Book work
- Lecture
- Demonstrations
- Video clips
- Hands on learning
- IEP accommodations

Interdisciplinary Connections:

- English- technical reading

Additional Resources:

- *Small Animal Care and Management 2nd Edition* by Dean M. Warren
- Power Points
- Note packets
- Small Animal Room

Created By: Meagan Smyers

			Small Animal Pet Care Grades 9-12 **Unit #8**
Course/Subject: Small Animal Pet Care/ Agriculture	**Grade:** 9-12	**Domesticated Rodents**	**Suggested Timeline:** 1 week

Grade Level Summary	Today, the pet industry is growing large and growing. This course will focus on the science behind the care and management of companion animals. Small and companion animals such as dogs, cats, rabbits, rodents, reptiles, amphibians, fish, birds, and other exotic species will be studied. Basic anatomy, reproduction, nutrition, health care, and related careers will be examined throughout the course for each species. Common diseases and conditions will also be studied through lab exercises and projects, which may include dissections, injections, surgical procedures and basic first-aid. All students are FFA members through this course.	
Grade Level Units	Unit 1: Introduction to Small Animal Pet Care Unit 2: Safety Unit 3: Nutrition and Digestive Systems Unit 4: Careers in Small Animal Care Unit 5: Dogs Unit 6: Cats	Unit 7: Rabbits Unit 8: Rodents as Pets Unit 9: Guinea Pigs, Chinchillas, and Ferrets Unit 10: Amphibians and Reptiles Unit 11: Birds Unit 12: Fish

Unit Title	Domesticated Rodents
Unit Summary	During this unit, students will learn hose to care for, manage, feed, and set up housing for rats and mice. Students will become knowledgeable in the different breeds/varieties of rats and mice. Students will learn about common diseases and ailments.

Unit Essential Questions:	**Key Understandings:**
1. What types of animal facilities are necessary when raising animals? 2. What are proper disposal methods for animal waste? 3. How do you prevent diseases in animals? 4. What are the common vaccines used in disease prevention? 5. What are the different breeds of hamsters/gerbils/rats/mice? 6. How do you feed and manage hamsters/gerbils/rats/mice? 7. What is the reproductive cycle of hamsters/gerbils/rats/mice?	1. Common Types 2. Management Practices 3. Diseases and Ailments

Focus Standards Addressed in the Unit:	
Standard Number	*Standard Description*
AS.01.	Analyze historic and current trends impacting the animal systems industry.
AS.02.	Utilize best-practice protocols based upon animal behaviors for animal husbandry and welfare.
AS.03.	Design and provide proper animal nutrition to achieve desired outcomes for performance, development, reproduction and/or economic production.

AS.04.	Apply principles of animal reproduction to achieve desired outcomes for performance, development and/or economic production.

Important Standards Addressed in the Unit:	
AS.05.	Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.
AS.06.	Classify, evaluate and select animals based on anatomical and physiological characteristics.
AS.07.	Apply principles of effective animal health care.
AS.08.	Analyze environmental factors associated with animal production.

Misconceptions:	**Proper Conceptions:**
1. You can't own a rat/mouse if you have a cat as a pet. 2. Gerbils can go without water. 3. Hamsters are tiny, so a tiny cage is a great choice for them.	1. Cats kept as pets rarely will seek live foods if they have adequate food available to them. 2. Gerbils need access to fresh water each day. 3. Hamsters like to explore. In the wild they can move over 8 miles a day.

Knowledge & Concepts	**Skills & Competencies**	**Dispositions & Practices**
● History of the common house gerbils, hamsters, mice and rats. ● Common diseases and ailments of hamsters, gerbils, rats and mice.	● Proper handling of hamsters, gerbils, rats and mice. ● Proper feeding of hamsters, gerbils, rats and mice.	● Ethical Judgment ● Critical Thinking

Academic Vocabulary:

● Demodectic mites ● Demodicosis ● Estivation ● Agouti ● Camouflage ● Monogamous ● Albino ● Black Plague ● Caped	● Meningitis ● Nocturnal ● Rectal prolapsed ● Mutations ● Obesity ● Red nose ● Carriers ● Gregarious ● Piebald ● Subordinate	● Solitary ● Wet tail ● Selective breeding ● Tyzzer's Disease ● Inbreeding ● Rodents ● Clan ● Colony Structure ● Condo

Assessments:

- Quizzes
- Test
- Projects
- Class participation and practices
- Small Animal Room Participation

Differentiation:

- Book work
- Lecture
- Demonstrations
- Video clips
- Hands on learning
- IEP accommodations

Interdisciplinary Connections:

- English- technical reading

Additional Resources:

- *Small Animal Care and Management 2nd Edition* by Dean M. Warren
- Power Points
- Note packets
- Small Animal Room

Created By: Meagan Smyers

			Small Animal Pet Care Grades 9-12 **Unit #9**
Course/Subject: Small Animal Pet Care/ Agriculture	**Grade:** 9-12	**Guinea Pigs, Chinchillas, and Ferrets**	**Suggested Timeline:** 1 week

Grade Level Summary	Today, the pet industry is growing large and growing. This course will focus on the science behind the care and management of companion animals. Small and companion animals such as dogs, cats, rabbits, rodents, reptiles, amphibians, fish, birds, and other exotic species will be studied. Basic anatomy, reproduction, nutrition, health care, and related careers will be examined throughout the course for each species. Common diseases and conditions will also be studied through lab exercises and projects, which may include dissections, injections, surgical procedures and basic first-aid. All students are FFA members through this course.	
Grade Level Units	Unit 1: Introduction to Small Animal Pet Care Unit 2: Safety Unit 3: Nutrition and Digestive Systems Unit 4: Careers in Small Animal Care Unit 5: Dogs Unit 6: Cats	Unit 7: Rabbits Unit 8: Rodents as Pets Unit 9: Guinea Pigs, Chinchillas, and Ferrets Unit 10: Amphibians and Reptiles Unit 11: Birds Unit 12: Fish

Unit Title	Guinea Pigs, Chinchillas, and Ferrets
Unit Summary	In this unit, students will learn the history of guinea pigs, chinchillas, and ferrets. Students will learn how to properly care for, house, and feed guinea pigs, chinchillas, and ferrets. Students will learn the different varieties/breeds of guinea pigs, chinchillas, and ferrets.

Unit Essential Questions: 1. What types of animal facilities are necessary when raising animals? 2. What are proper disposal methods for animal waste? 3. How do you prevent diseases in animals? 4. What are the common vaccines used in disease prevention? 5. What are the different breeds of guinea pigs/chinchillas/ferrets? 6. How do you feed and manage guinea pigs/chinchillas/ferrets? 7. What is the reproductive cycle of guinea pigs/chinchillas/ferrets?	**Key Understandings:** 1. History 2. Varieties 3. Management 4. Diseases

Focus Standards Addressed in the Unit:	
Standard Number	*Standard Description*
AS.01.	Analyze historic and current trends impacting the animal systems industry.
AS.02.	Utilize best-practice protocols based upon animal behaviors for animal husbandry and welfare.

AS.03.	Design and provide proper animal nutrition to achieve desired outcomes for performance, development, reproduction and/or economic production.
AS.04.	Apply principles of animal reproduction to achieve desired outcomes for performance, development and/or economic production.

Important Standards Addressed in the Unit:	
AS.05.	Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.
AS.06.	Classify, evaluate and select animals based on anatomical and physiological characteristics.
AS.07.	Apply principles of effective animal health care.
AS.08.	Analyze environmental factors associated with animal production.

Misconceptions:	**Proper Conceptions:**
1. You must add vitamin drops to guinea pigs' water. 2. Chinchillas are nocturnal. 3. Ferrets stink.	1. If you provide a proper diet for your guinea pigs' you will not need to add vitamin drops. 2. Chinchillas are most active between dawn and dusk. 3. Ferrets can have scent glands removed to ease the smell. A lot of the smells come from a poor diet.

Knowledge & Concepts	**Skills & Competencies**	**Dispositions & Practices**
● History of ferrets, chinchillas, and Guinea pigs ● Varieties/breeds of ferrets, chinchillas, and Guinea pigs. ● Common diseases/ailments of ferrets, chinchillas, and Guinea pigs.	● Handling of ferrets, chinchillas, and Guinea pigs. ● Setting up housing for ferrets, chinchillas, and Guinea pigs. ● Feeding ferrets, chinchillas, and Guinea pigs.	● Ethical Judgment ● Critical Thinking

Academic Vocabulary:

● Abscess	● Malocclusion	● Rosettes
● Cavy	● Mane	● Ticking
● Crest	● Oral Mucosa	● Vivariums
● Kinked	● Peripheral Vision	● Progeny
● Enteritis	● Pathogenic organisms	● Trophozoites
● Grotzen	● Polygamous	● Veil
● Impaction	● Prime Fur	● Aplastic Anemia
● Otitis	● Priming line	● Bib
● Hobs	● Ferreting	● Estrogen
● Jills	● Kits	● Mitt

Assessments:

- Quizzes
- Test
- Projects
- Class participation and practices
- Small Animal Room Participation

Differentiation:

- Book work
- Lecture
- Demonstrations
- Video clips
- Hands on learning
- IEP accommodations

Interdisciplinary Connections:

- English- technical reading
- Biology- anatomy

Additional Resources:

- *Small Animal Care and Management 2nd Edition* by Dean M. Warren
- Power Points
- Note packets
- Small Animal Room

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			Small Animal Pet Care Grades 9-12 **Unit #10**
Course/Subject: Small Animal Pet Care/ Agriculture	**Grade:** 9-12	**Amphibians and Reptiles**	**Suggested Timeline:** 1 week

Grade Level Summary	Today, the pet industry is growing large and growing. This course will focus on the science behind the care and management of companion animals. Small and companion animals such as dogs, cats, rabbits, rodents, reptiles, amphibians, fish, birds, and other exotic species will be studied. Basic anatomy, reproduction, nutrition, health care, and related careers will be examined throughout the course for each species. Common diseases and conditions will also be studied through lab exercises and projects, which may include dissections, injections, surgical procedures and basic first-aid. All students are FFA members through this course.	
Grade Level Units	Unit 1: Introduction to Small Animal Pet Care Unit 2: Safety Unit 3: Nutrition and Digestive Systems Unit 4: Careers in Small Animal Care Unit 5: Dogs Unit 6: Cats	Unit 7: Rabbits Unit 8: Rodents as Pets Unit 9: Guinea Pigs, Chinchillas, and Ferrets Unit 10: Amphibians and Reptiles Unit 11: Birds Unit 12: Fish

Unit Title	Amphibians and Reptiles
Unit Summary	In this unit, students will learn the characteristics of different reptiles and amphibians. Students will learn different techniques to handling reptiles and amphibians. Students will learn the best practices for housing and caring for reptiles and amphibians.

Unit Essential Questions:	**Key Understandings:**
1. What types of animal facilities are necessary when raising animals? 2. What are proper disposal methods for animal waste? 3. How do you prevent diseases in animals? 4. What are the common methods used in disease prevention? 5. What are the different species of amphibians and reptiles? 6. How do you feed and manage amphibians and reptiles? 7. What are the reproductive cycles of amphibians and reptiles?	1. Management and feeding 2. Classification 3. Habitat 4. Characteristics 5. Feeding and Management 6. Housing and equipment

Focus Standards Addressed in the Unit:	
Standard Number	*Standard Description*
AS.01.	Analyze historic and current trends impacting the animal systems industry.
AS.02.	Utilize best-practice protocols based upon animal behaviors for animal husbandry and welfare.
AS.03.	Design and provide proper animal nutrition to achieve desired outcomes for performance, development, reproduction and/or economic production.
AS.04.	Apply principles of animal reproduction to achieve desired outcomes for performance, development and/or economic production.

Important Standards Addressed in the Unit:	
AS.05.	Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.
AS.06.	Classify, evaluate and select animals based on anatomical and physiological characteristics.
AS.07.	Apply principles of effective animal health care.
AS.08.	Analyze environmental factors associated with animal production.

Misconceptions:	**Proper Conceptions:**
1. Snakes don't have bones.	1. Snakes have numerous bones.
2. All lizards eat flies and other insects.	2. Lizards can a variety of foodstuffs in their diet.
3. You can get warts from touching frogs and toads.	3. You cannot get warts from handling frogs and toads.

Knowledge & Concepts	Skills & Competencies	Dispositions & Practices
● Recognizing different species of reptiles and amphibians ● Equipment needs of reptiles and amphibians	● Handling reptiles and amphibians ● Setting up housing for reptiles and amphibians	● Ethical Judgment ● Critical Thinking

Academic Vocabulary:

● Amphibians	● Metamorphosis	● Osmosis
● Amphiumas	● Newts	● Sirens
● Cloaca	● Olm	● Spermatophore
● Aboreal	● Ectotherms	● Scutes
● Brille	● Hemipenes	● Terrapins
● Brood	● Lamellae	● Terrarium
● Carapace	● Oviparous	● Tympanum
● Casque	● Ovoviviparous	● Vivarium
● Crepuscular	● plastron	● Viviparous
● Dimorphism		

Assessments:

- Quizzes
- Test
- Projects
- Class participation and practices
- Small Animal Room Participation

Differentiation:

- Book work
- Lecture
- Demonstrations
- Video clips

- Hands on learning
- IEP accommodations

Interdisciplinary Connections:
- English- technical reading

Additional Resources:
- *Small Animal Care and Management 2nd Edition* by Dean M. Warren
- Power Points
- Note packets
- Small Animal Room

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			Small Animal Pet Care Grades 9-12 **Unit #11**
Course/Subject: Small Animal Pet Care/ Agriculture	**Grade:** 9-12	**Birds**	**Suggested Timeline:** 1 week

Grade Level Summary	Today, the pet industry is growing large and growing. This course will focus on the science behind the care and management of companion animals. Small and companion animals such as dogs, cats, rabbits, rodents, reptiles, amphibians, fish, birds, and other exotic species will be studied. Basic anatomy, reproduction, nutrition, health care, and related careers will be examined throughout the course for each species. Common diseases and conditions will also be studied through lab exercises and projects, which may include dissections, injections, surgical procedures and basic first-aid. All students are FFA members through this course.	
Grade Level Units	Unit 1: Introduction to Small Animal Pet Care Unit 2: Safety Unit 3: Nutrition and Digestive Systems Unit 4: Careers in Small Animal Care Unit 5: Dogs Unit 6: Cats	Unit 7: Rabbits Unit 8: Rodents as Pets Unit 9: Guinea Pigs, Chinchillas, and Ferrets Unit 10: Amphibians and Reptiles Unit 11: Birds Unit 12: Fish

Unit Title	Birds
Unit Summary	Students will learn characteristics of birds as well as the different orders of birds. Students will learn basic care and management of birds. Common diseases and ailments will also be discussed during this unit.

Unit Essential Questions:	**Key Understandings:**
1. What types of animal facilities are necessary when raising animals? 2. What are proper disposal methods for animal waste? 3. How do you prevent diseases in animals? 4. What are the common vaccines used in disease prevention? 5. What are the different breeds of birds? 6. How do you feed and manage birds? 7. What is the reproductive cycle of birds?	1. Characteristics 2. Classification 3. Feeding and Management 4. Diseases 5. Housing and Equipment

Focus Standards Addressed in the Unit:	
Standard Number	*Standard Description*
AS.01.	Analyze historic and current trends impacting the animal systems industry.
AS.02.	Utilize best-practice protocols based upon animal behaviors for animal husbandry and welfare.
AS.03.	Design and provide proper animal nutrition to achieve desired outcomes for performance, development, reproduction and/or economic production.
AS.04.	Apply principles of animal reproduction to achieve desired outcomes for performance, development and/or economic production.

Important Standards Addressed in the Unit:	
AS.05.	Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.
AS.06.	Classify, evaluate and select animals based on anatomical and physiological characteristics.
AS.07.	Apply principles of effective animal health care.
AS.08.	Analyze environmental factors associated with animal production.

Misconceptions:	**Proper Conceptions:**
1. Birds have a short life expectancy. 2. All birds can be taught to talk.	1. Life expectancy in birds ranges a great deal. Some live past 80 years. 2. Only a few species of birds can be taught to talk and not all of those are always willing to say what they have learned.

Knowledge & Concepts	Skills & Competencies	Dispositions & Practices
● Reproduction of birds ● Common diseases and ailments ● Common Species of Domesticated birds	● How to train and handle birds ● Clipping Wings ● Feeding	● Ethical Judgment ● Critical Thinking

Academic Vocabulary:

● Aviary	● Filoplume feathers	● Mantle
● Cere	● Flight feathers	● Papilla
● Clutch	● Grit	● Powder-down feathers
● Contour feathers	● Isthmus	● Preen
● Coverts	● Lores	● Scalloped feathers
● Crown	● Lutinos	● Scapulars
● Down feathers	● Mandibles	● Sternum

Assessments:

- Quizzes
- Test
- Projects
- Class participation and practices
- Small Animal Room Participation

Differentiation:

- Book work
- Lecture
- Demonstrations
- Video clips
- Hands on learning
- IEP accommodations

Interdisciplinary Connections:

- English- technical reading
- Biology- anatomy

Additional Resources:

- *Small Animal Care and Management 2nd Edition* by Dean M. Warren
- Power Points
- Note packets
- Small Animal Room

Created By: Meagan Smyers

			Small Animal Pet Care Grades 9-12 **Unit #12**
Course/Subject: Small Animal Pet Care/ Agriculture	**Grade:** 9-12	**Fish**	**Suggested Timeline:** 1 week

Grade Level Summary	Today, the pet industry is growing large and growing. This course will focus on the science behind the care and management of companion animals. Small and companion animals such as dogs, cats, rabbits, rodents, reptiles, amphibians, fish, birds, and other exotic species will be studied. Basic anatomy, reproduction, nutrition, health care, and related careers will be examined throughout the course for each species. Common diseases and conditions will also be studied through lab exercises and projects, which may include dissections, injections, surgical procedures and basic first-aid. All students are FFA members through this course.	
Grade Level Units	Unit 1: Introduction to Small Animal Pet Care Unit 2: Safety Unit 3: Nutrition and Digestive Systems Unit 4: Careers in Small Animal Care Unit 5: Dogs Unit 6: Cats	Unit 7: Rabbits Unit 8: Rodents as Pets Unit 9: Guinea Pigs, Chinchillas, and Ferrets Unit 10: Amphibians and Reptiles Unit 11: Birds Unit 12: Fish

Unit Title	Fish
Unit Summary	During this unit, students will know the different characteristics of fish and be able to compare the three classes of fish. Students will have an understanding of freshwater and saltwater aquariums and how to care for and maintain fish and their habitats. Students will be learn common diseases that affect aquarium fish.

Unit Essential Questions:	**Key Understandings:**
1. What types of animal facilities are necessary when raising animals? 2. What are proper disposal methods for animal waste? 3. How do you prevent diseases in animals? 4. What are the different species of fish? 5. How do you feed and manage freshwater and saltwater fish? 6. What is the reproductive cycle of fish?	1. Characteristics 2. Classification 3. Freshwater and saltwater 4. Habitat 5. Diseases

Focus Standards Addressed in the Unit:

Standard Number	*Standard Description*
AS.01.	Analyze historic and current trends impacting the animal systems industry.
AS.02.	Utilize best-practice protocols based upon animal behaviors for animal husbandry and welfare.
AS.03.	Design and provide proper animal nutrition to achieve desired outcomes for performance, development, reproduction and/or economic production.

AS.04.	Apply principles of animal reproduction to achieve desired outcomes for performance, development and/or economic production.

Important Standards Addressed in the Unit:	
AS.05.	Evaluate environmental factors affecting animal performance and implement procedures for enhancing performance and animal health.
AS.06.	Classify, evaluate and select animals based on anatomical and physiological characteristics.
AS.07.	Apply principles of effective animal health care.
AS.08.	Analyze environmental factors associated with animal production.

Misconceptions:	**Proper Conceptions:**
1. Fish are the easiest pets to care for. 2. Fish are best for people with little time. 3. Fish are cheap.	1. Fish as pets requires a lot of knowledge and research. 2. Maintaining an aquarium is time consuming. 3. Care and maintenance can be costly.

Knowledge & Concepts	**Skills & Competencies**	**Dispositions & Practices**
● Common diseases and ailments ● Breeds of fish ● Care of salt water and fresh water aquariums	● Aquarium tank set up ● Testing pH levels ● Fish selection	● Ethical Judgment ● Critical Thinking

Academic Vocabulary:

● Anal fin	● Community aquariums	● Pelvic fins
● Adipose fin	● Dorsal fin	● Protrusive
● Anterior	● Gonopodium	● Shoals
● Aquarists	● Labyrinthine chamber	● Spawning
● Barbels	● Neuromasts	● Species aquarium
● Brackish	● Pectoral fins	● Symbiosis
● Caudal fin	● Peduncle	● Vent

Assessments:

- Quizzes
- Test
- Projects
- Class participation and practices
- Small Animal Room Participation

Differentiation:

- Book work
- Lecture
- Demonstrations
- Video clips
- Hands on learning

- IEP accommodations

Interdisciplinary Connections:

- Math- measurements
- English- technical reading

Additional Resources:

- *Small Animal Care and Management 2nd Edition* by Dean M. Warren
- Power Points
- Note packets
- Small Animal Room

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