

Lesson B2–8

Exploring the Cat Industry

Unit B. Animal Science and the Industry

Problem Area 2. Identifying and Understanding the Segments of the Animal Science Industry

Lesson 8. Exploring the Cat Industry

New Mexico Content Standard:

Pathway Strand: Animal Systems

Standard: I: Apply knowledge of anatomy and physiology to produce and/or manage animals in a domesticated or natural environment.

Benchmark: I-A. Use classification systems to explain basic functions of animal anatomy and physiology.

Performance Standard: 1. Describe functional difference in animal structures and body systems. 2. Classify animals according to anatomy and physiology.

Student Learning Objectives. Instruction in this lesson should result in students achieving the following objectives:

1. Describe the biology and physiology of a cat.
2. Explain classes and breeds of cats.
3. Identify management, training, and grooming of cats.
4. List considerations when selecting a cat.

List of Resources. The following resources may be useful in teaching this lesson:

Lee, Jasper S. *Introduction to Livestock and Companion Animals 2nd Edition*.
Danville, Illinois: Interstate Publishers, Inc. 2000 (Textbook and Activity Manual Chapter 16)

Recommended Resources. One of the following resources should be selected to accompany the lesson:

Cooper, Elmer L., Burton, DeVere L., *Agriscience Fundamentals and Applications*.
Albany, New York: Delmar. 2002 (Textbook Unit 30)

Other Resources. The following resources will be useful to students and teachers:

Internet keywords: tomcat, queen, kitten, feline

List of Equipment, Tools, Supplies, and Facilities

Writing surface
Overhead projector
Transparencies from attached masters
Copies of student lab sheet

Terms. The following terms are presented in this lesson (shown in bold italics):

Companion animal
Declawed
Hairballs
Kitten
Litter
Neutering
Queen
Spaying
Tomcat

Interest Approach. Use an interest approach that will prepare the students for the lesson. Teachers often develop approaches for their unique class and student situations. A possible approach is included here.

Display a litter box, cat litter, a pet carrier, cat brush, and a scratching post along with any other supplies you have access to. You may offer extra credit to students to bring these materials in. Use the supplies to create interest in the subject by discussing what each item is and what it is used for.

Summary of Content and Teaching Strategies

Objective 1: Describe the biology and physiology of a cat.

Anticipated Problem: What are terms unique to cats and their anatomy?

- I. Cats are very common in the U.S. Around 60 million are used as companion animals. A **companion animal** is any domestic animal kept for enjoyment and companionship with humans. There are many facts to learn about cats' biology, anatomy, and terms associated with them.
 - A. Cats can live up to 30 years, but most only live between 12 and 18. A mature male cat is called a **tomcat**. A mature female cat is called a **queen**. A baby cat of either sex is called a **kitten**. A group of kittens born to the same parents is called a **litter**.
 - B. Typically, cats weigh between 6 and 15 pounds at maturity. They have approximately 250 bones and 500 muscles. Their life processes are similar to other mammals. Even though most cats are fed cat food designed especially for their needs, by nature they are carnivores that can feed on mice and rats. Cats differ from other animals because they have extra sensitive ears, noses, and paws. They also have extra taste organs and can therefore distinguish between foods. Cats have three-dimensional vision and their whiskers are attached to nerves that help cats to find their way in the dark.
 - C. Other animals in the cat family include lions and tigers. Cats are similar to these wild animals because their foot structures are closely designed. Since cats are domesticated, often their owners have cats declawed so they don't damage carpeting, furniture, and curtains. **Declawed** means that the cat's claws are surgically removed by a veterinarian. It is important to keep cats that are declawed inside because they no longer have their most important defense mechanism.
 - D. The skeleton system of a cat is very complex. Cats need to be quick and agile to survive outside a house.

Use TM: B2–8A as an overhead or handout to discuss the skeletal system of a cat.

Objective 2: Explain classes and breeds of cats.

Anticipated Problem: What are the classes and breeds of cats?

- II. There are many different classes and breeds of cats. The main choices are purebred or the common house cat that is not purebred. There are two classes of purebred cats short-haired and long-haired. There are 36 breeds found in the U.S.
 - A. Short-haired breeds are popular because they are less work than long-haired breeds. They require little to no brushing and have less hair to shed. Some common breeds include:
 1. Rex

2. Siamese
 3. American Shorthair
 4. Japanese
 5. Burmese
 6. Japanese Bobtail
 7. Manx
 8. Russian Blue
 9. Korat
 10. Egyptian Mau
- B. Long-haired breeds require more work because they need to be brushed frequently. They often get hairballs because they lick themselves. **Hairballs** are wads of hair that collect inside the digestive tract and block the digestion of food. Some common breeds of long-haired cats that are popular in the U.S. include:
1. Turkish Angora
 2. Himalayan
 3. Persian
 4. Balinese
 5. Maine Coon

Use TM: B2–8B to discuss major cat breeds in the U.S.

Objective 3: Identify management, training, and grooming of cats.

Anticipated Problem: How do I manage, train, and groom my cat?

- III. It is important to properly manage, train, and groom your cat to fit your personal needs. The cat and the owner will both be much happier if they are well-suited for each other.
- A. Management of cats includes selecting a cat that is healthy and alert. Find out what medical attention the animal has had and if vaccinations have been given. Always handle your cat with care by making sure it feels secure. Use patience and allow plenty of time to help your cat get adjusted to a new home. Don't expect that your cat is going to come trained to your liking. Show your cat that you care about it by properly bathing and grooming it. Never leave your cat without fresh water and clean bedding. Since your cat needs plenty of exercise make sure they have enough space. Have your pet spayed or neutered if you don't want them to produce kittens.
- B. Training cats requires knowledge of the animal's habits and a good idea of what you want training to accomplish. The most common use of training is toilet training. Cats are generally easy to train to use a litter box. Buy a litter box and some cat litter and put it in an area that the cat will always have access to. You may want to choose a spot that is out of sight! Place the cat in the litter box and show the cat how to scratch its front paws in the litter. Watch your cat for signs that it is looking for a place to urinate or defecate and

then place the cat in the litter box. Rewarding your cat with a treat is a great way to reinforce a positive behavior.

- C. Grooming your cat can be a wonderful opportunity for you to bond with your animal. Even though cats groom themselves often, they can benefit from your help. A cat's hair coat should be brushed daily with a small soft brush. It may also need a bath occasionally. Its nails need to be trimmed if you do not have a scratching post. Always trim nails with a special cat clipper and file and never clip them below the nail bed. If you clip too short, you will cause bleeding. If you are unsure of yourself, take your cat to a groomer or vet clinic to have the nails trimmed.
- D. When you groom your cat, check its ears for mites and ticks. Carefully treat the animal if any are present. You should also monitor your cat's eyes for discharge as it can indicate an infection.
- E. Use foods that encourage clean teeth and have plaque and tartar removed by your veterinarian.
- F. It is very important to keep your cat healthy and comfortable. If you notice something that does not seem normal, contact your vet for professional advice.

Use TM: B2–8C as an overhead to discuss proper clipping of nails.

Objective 4: List considerations when selecting a cat.

Anticipated Problem: What should I consider when selecting a cat?

- IV. Cats are wonderful pets that don't require as much care and space as other animals. Cats also tend to be independent and affordable. There are four main things to consider when selecting a cat. They are age, gender, breed, and medical needs.
 - A. Age is important to consider because kittens are much more work than older cats. Kittens may be cute and cuddly, but they require special attention to their feeding and training. Adult cats tend to be more stressed when moved to a new situation and may come with old habits.
 - B. Gender is important, especially if you want kittens. If the animals are not fixed, males may urinate frequently to mark their territory and females will go through reproductive cycles and become annoying when they are in heat. **Spaying** is removing the ovaries and uterus of a queen to prevent the animal from breeding. **Neutering** is the process of altering a tomcat sexually to prevent it from breeding.
 - C. Choosing between purebred and non purebred depends on how much money you want to invest. It is more expensive to buy a cat with a pedigree.
 - D. Medical needs must be considered before selecting a cat to ensure the animal fits within your budget. Declawing and spaying or neutering are just two of the costs you need to consider before purchasing a cat.

Use TM: B2–8D as an overhead to discuss things to consider when purchasing a cat.

Review/Summary. Use the student learning objectives to summarize the lesson. Have students explain the content associated with each objective. Student responses can be used to determine which objectives need to be reviewed or retaught with a different approach. Questions provided in the recommended textbooks may also be used to help review.

Application. Application can involve student activity with the provided labs.

Evaluation. Evaluation should focus on student achievement of the objectives for each lesson. Various techniques can be used, such as performance on the application activities. A sample written test is attached.

Answers to Sample Test:

Part One: Matching

1 = f, 2 = c, 3 = d, 4 = e, 5 = b, 6 = a

Part Two: Completion

1. companion animal
2. Spaying
3. neutering
4. long-haired
5. 250, 500

Part Three: Short Answer

Age
Gender
Purebred or Non Purebred
Medical Needs

Test

Lesson B2–8: Exploring the Cat Industry

Part One: Matching

Instructions. Match the term with the correct response. Write the letter of the term by the definition.

- | | | |
|--------------|-----------|-----------|
| a. Declawed | c. Queen | e. Litter |
| b. Hairballs | d. Kitten | f. Tomcat |

- _____ 1. A mature male cat.
- _____ 2. A mature female.
- _____ 3. A baby cat of either sex.
- _____ 4. A group of kittens born to the same parents.
- _____ 5. Wads of hair that collect inside the digestive tract and block the digestion of food.
- _____ 6. The cat's claws are surgically removed by a veterinarian.

Part Two: Completion

Instructions. Provide the word or words to complete the following statements.

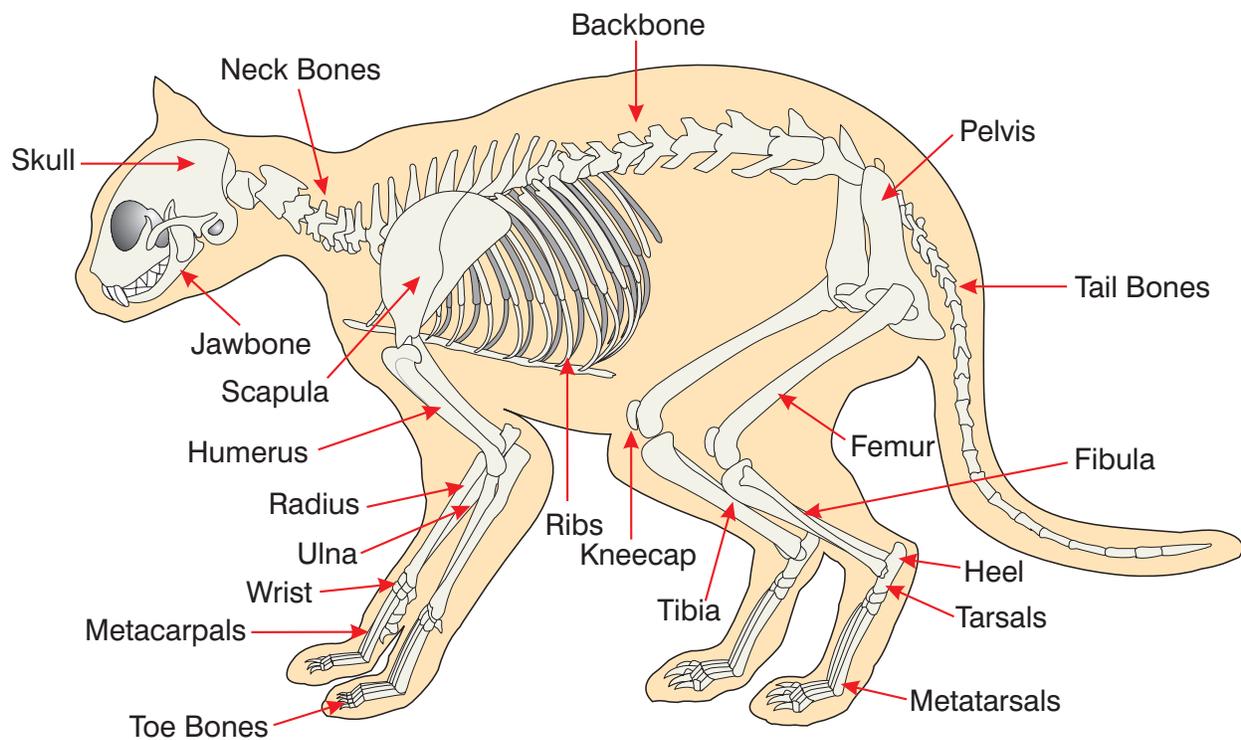
1. A _____ is any domestic animal kept for enjoyment and companionship with humans.
2. _____ is removing the ovaries and uterus of a queen to prevent the animal from breeding.
3. _____ is the process of altering a tomcat sexually to prevent it from breeding.
4. There are two classes of purebred cats short-haired and _____.
5. Cats have approximately _____ bones and _____ muscles.

Part Three: Short Answer

Instructions. Provide information to answer the following question.

What are four things to consider when purchasing a cat?

SKELETAL SYSTEM OF A CAT



MAJOR BREEDS OF PUREBRED CATS IN THE U.S.

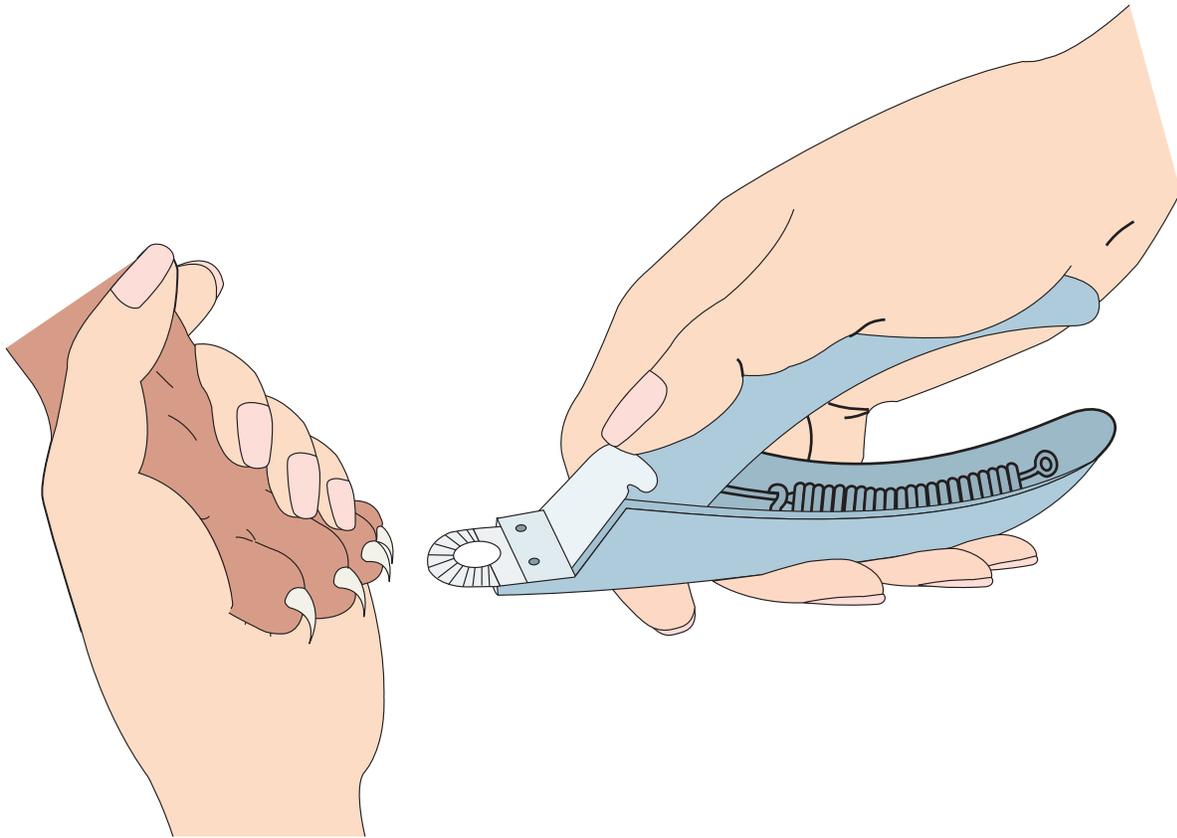
Short-haired Breeds

- 1. Rex**
- 2. Siamese**
- 3. American Shorthair**
- 4. Japanese**
- 5. Burmese**
- 6. Japanese Bobtail**
- 7. Manx**
- 8. Russian Blue**
- 9. Korat**
- 10. Egyptian Mau**

Long-haired Breeds

- 1. Turkish Angora**
- 2. Himalayan**
- 3. Persian**
- 4. Balinese**
- 5. Maine Coon**

NAIL CLIPPING



CONSIDERATIONS WHEN PURCHASING A CAT

Age

Gender

Purebred or Non Purebred

Medical Needs

Lab Sheet

Purpose:

Research cat breeds.

Procedure:

Pick a long-haired or short-haired breed of cat. Write a paper explaining the history, colors, size, and other features common to the breed.

Materials:

Research materials
Paper
Writing utensil