

SWINE



JEFFERSON COUNTY SKILLATHON GUIDELINES SWINE

-Project #139 - Market Hog Project and Record Book
#134R - Swine Resource Handbook (an optional reference book)

STATIONS IN SKILLATHON - 4-H age is age as of January 1 of current year.

JUNIOR (4-H Age 8, 9, 10, 11)

Station 1: Nutrition- Participants will be required to match food items with the nutrients they provide.

Station 2: Parts- Participants will be required to match parts names with the corresponding picture.

Station 3: Medication Insert- Participants will be required to match items on the medication insert with their location on the sheet.

Station 4: Quality Assurance-T&F - Participants will be required to answer True and False questions.

INTERMEDIATE: (4-H Age 12, 13, 14)

ALL JUNIOR STATIONS LISTED ABOVE, PLUS

Station 5: Drug Use Notification Form (DUNF). Participants will practice filling out a Drug Use Notification Form

SENIOR: (4-H Age 15 and over)

ALL JUNIOR AND INTERMEDIATE STATIONS LISTED ABOVE, PLUS

Station 6: Meat Cuts-Wholesale - Participants will be required to match wholesale meat cut names with the corresponding pictures.

ALL AGES: Additional Station:

1.) **Trip Around the Fairgrounds -** At this Station (new in 2011), participants will be required to identify the names of different animals which can be seen at the county fair. A total of 20 animals will be pictured and members can name up to eight (8) of them. They will be scored at one (1) point each, for a possible total of up to eight (8) points.

2.) **Project Books Turned In -** All project books (new in 2011) must be turned in by the last Skillathon scheduled date. Books will be determined as "COMPLETE" or "INCOMPLETE". In order to attain Most Outstanding Skillathon Youth, books must be determined, "Complete". A "Completed" book will count as (twelve) 12 points and an "Incomplete" book will count as zero (0). Books must be checked and signed by an Advisor.

Station 1

Nutrition

**Juniors, Intermediates &
Seniors**

Background Information

Feed Nutrient Categories

Feeds are divided into these categories: water, proteins, energy (carbohydrates and fats), minerals and vitamins, each of which are briefly explained here:

Water is the most essential nutrient and the nutrient to which livestock should always have access. A mature animal's body is about 75% water. Water comprises most of the blood, it is necessary for certain chemical reactions to occur, it acts as the body's cooling system and helps regulate body heat, and it acts as a lubricant for the body's organs. Any living thing can live longer without food than without water.

Proteins are complex chemical substances from which the body tissues are built. Proteins are made up of small units called amino acids. Each species of livestock can produce some amino acids within their bodies; others must be supplied through the feed. Proteins are used by the animal to produce muscle, bone, blood, skin, fur, hair, wool, hooves and horns. Feeds that contain protein include: cottonseed meal, soybean meal, linseed meal, corn gluten meal, distillers grains and fish meal. Urea can be used by ruminant animals to make protein.

Energy (carbohydrates and fats) are used as fuel to supply energy. It helps maintain body temperature and to produce body movement. Energy nutrients not used are stored as fat until needed. Energy-supplying feeds include: sugars, grains (such as wheat, oats and barley) and corn.

Vitamins are compounds which help the body absorb and use other nutrients. Vitamins are essential for growth and are needed in small amounts by the animal. Some animals make their own vitamins within their bodies, other species cannot. Because of that, a steer should not be fed the same vitamin pre-mix as a pig. Vitamins are generally supplied in animal feed in the form of a supplement or provided by consumption of green pasture.

Minerals are used to build bones and teeth. Examples of mineral supplements include bone meal, Dicalcium phosphate, salt, trace mineralized salt and limestone.

Classifying Feed Ingredients Into Nutrient Groups

Energy (Carbohydrates and Fats)¹

Whole Grain Barley
Whole Grain Oats
Wheat
Wheat Middlings*
Corn
Milo
Beet Pulp
Hay and Hay Cubes*
Molasses
Whole Grain Rye
Whole Cottonseed*
Buckwheat
Soybean Hulls
Dried Whey

Proteins¹

Cottonseed Meal
Soybean Meal
Linseed Meal
Corn Gluten Meal
Corn Gluten Feed*
Distillers Grain
Brewers Grain
Blood Meal
Fish Meal
Dehydrated Alfalfa Meal Pellets*

Urea (is a non-protein nitrogen source that is used in small amounts for protein in ruminant diets).

¹ A protein supplement is usually defined as a feed containing greater than or equal to 20% crude protein (dry matter basis). Some feeds (for example, those marked with an "**") may be described as protein or energy because they are moderate in fat (energy) and protein or because their concentration of protein may vary to being less than or greater than 20% crude protein. Therefore, those feeds marked with an "**" are most commonly classified as listed above.

Minerals

Bone Meal
Dicalcium Phosphate
White Salt
Trace Mineral Salt
Ground Limestone

Vitamins

None of the feeds listed is a vitamin-only pre-mix.

Water

**The complete pelleted feed is not listed under a specific category because it contains carbohydrates, proteins, minerals, and vitamins.

Reference: "Feeds & Nutrition", 1990, M. B. Epsminger, J. E. Oldfield, and W. W. Heinemann.
Epsminger Publishing Company, Clovis CA.

Examples of feed ingredients are on pages 8-6-8-10 of this book.

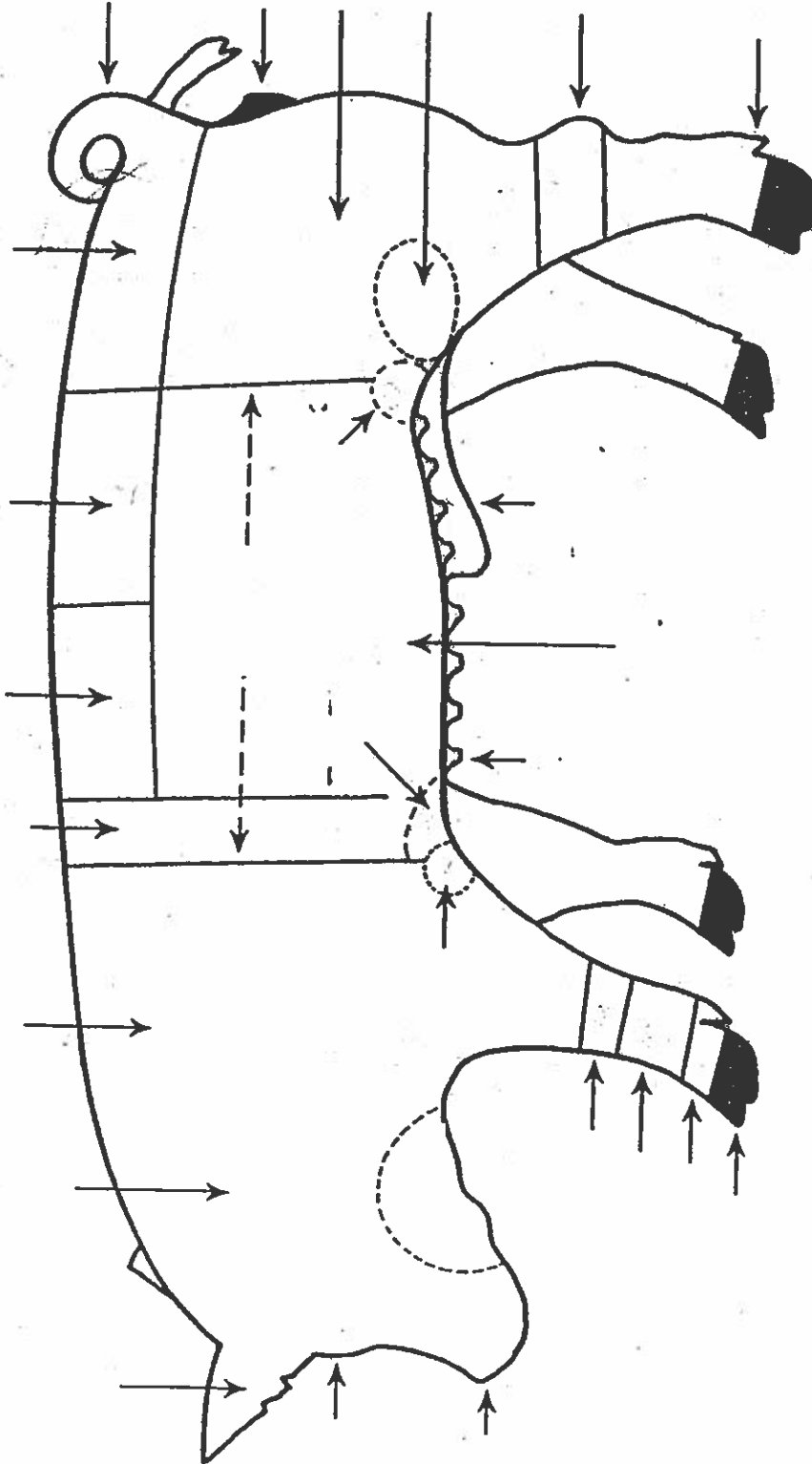
Station 2

Parts

**Juniors, Intermediates &
Seniors**

Use this poster in conjunction with Body Structure - Match Names with Parts situation/task statement and/or Parts of a Hog Identification tags

Parts of a Hog

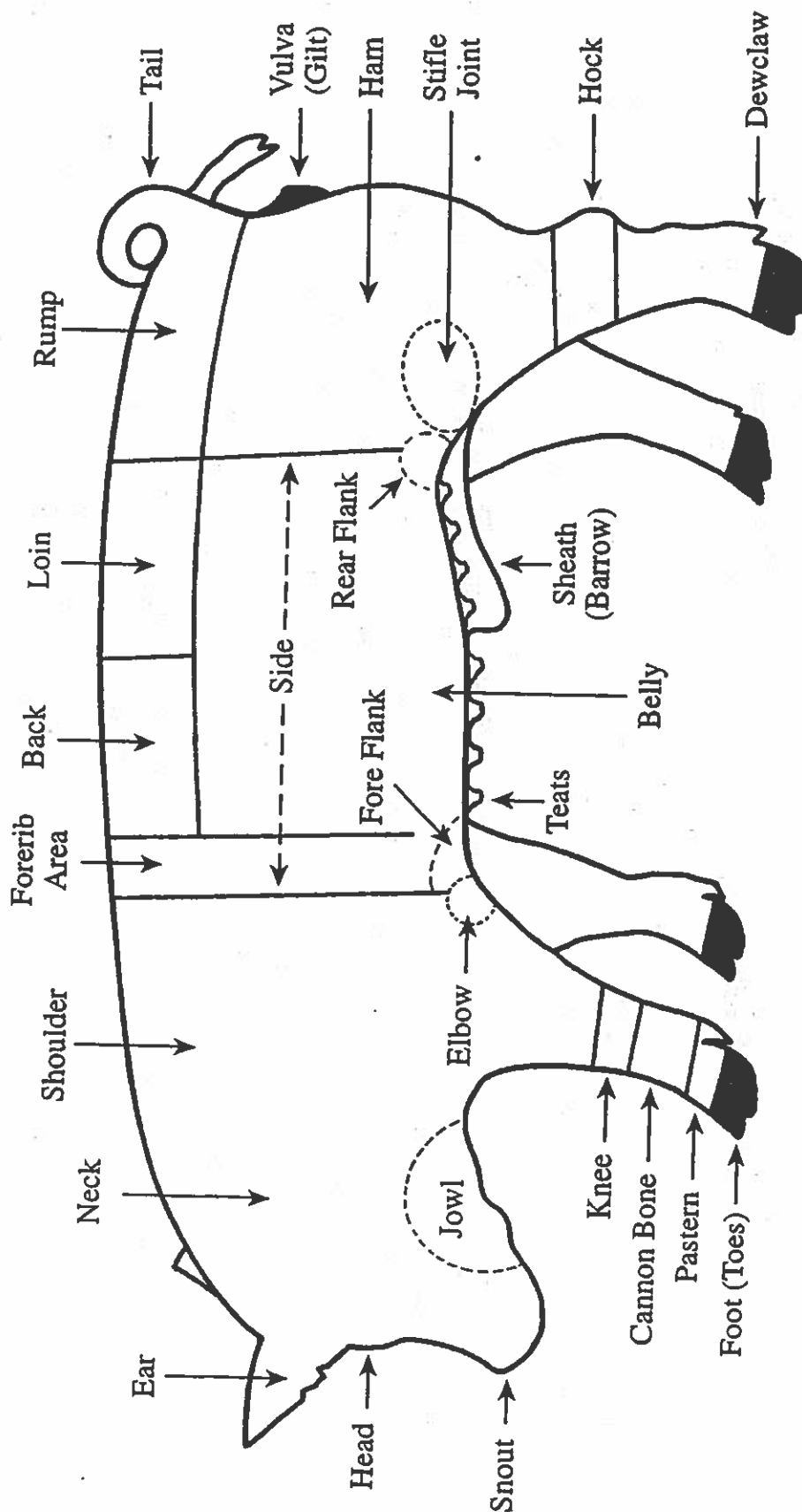


Quality Assurance and Animal Care: Youth Education Program
This material is based upon work supported by Extension Service,
United States Department of Agriculture, under special project number 93-EFSQ-4096.
Product distribution through the Ohio Agricultural Extension Curriculum Materials Service.

SWAN
LEARNING LABORATORY KIT

Use this poster in conjunction with Body Structure - Match Names with Parts situation/task statement and/or Parts of a Hog Identification tags

Parts of a Hog



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Station 3 Medication Insert

**Juniors, Intermediates &
Seniors**

Use this poster in conjunction with Quality Assurance Medication Label - Read and Match the Parts situation/task statement and the Medication Insert Parts Identification tags

Medication Insert

Name of Drug

OMNIBIOTIC

(Hydrocillin in Aqueous Suspension)

Active Ingredients

For use in Beef Cattle, Lactating and Non-Lactating Dairy Cattle, Swine and Sheep

Species and Animal Class

Read Entire Brochure Carefully Before Using This Product

For Intramuscular Use Only

Approved Uses

Active Ingredients: Omnibiotic is an effective antimicrobial preparation containing hydrocillin hydrochloride. Each ml of this suspension contains 200,000 units of hydrocillin hydrochloride in an aqueous base.

Indications: Cattle - bronchitis, foot rot, leptospirosis, mastitis, metritis, pneumonia, wound infections. Swine - erysipelas, pneumonia. Sheep - foot rot, pneumonia, mastitis; and other infections in these species caused by or associated with hydrocillin-susceptible organisms.

Recommended Daily Dosage

The usual dose is 2 ml per 100 lb of body weight given once daily. Maximum dose is 15 ml/day.

Dosage

Body Weight

Dosage

100 lb

2 ml

300 lb

6 ml

500 lb

10 ml

750 lb or more

15 ml

Continue treatment for 1 to 2 days after symptoms disappear.

Cautions and Warnings

Caution: 1. Omnibiotic should be injected deep within the fleshy muscle of the neck or thigh. Do not inject this material in the hip or rump, subcutaneously, into a blood vessel, or near a major nerve because it may cause tissue damage. 2. If improvement does not occur within 48 hours, the diagnosis should be reconsidered and appropriate treatment initiated. 3. Treated animals should be closely observed for at least 30 minutes. Should a reaction occur, discontinue treatment and immediately administer epinephrine and antihistamines. 4. Omnibiotic must be stored between 2° and 8° C (36° to 46° F). Warm to room temperature and shake well before using. Keep refrigerated when not in use.

Route of Administration

Storage Requirements

Sizes Available

Warning: Milk that has been taken from animals during treatment and for 48 hours (4 milkings) after the last treatment must not be used for food. The use of this drug must be discontinued for 30 days before treated animals are slaughtered for food.

Withholding Times

TAKE TIME



OBSERVE LABEL DIRECTIONS

How Supplied: Omnibiotic is available in vials of 100 ml.



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Station 4
Quality
Assurance
True & False

**Juniors, Intermediates &
Seniors**

GENERAL LIVESTOCK T/F JUNIOR

- 1.) It is OK to mix animal health products if a vet tells you to.
- 2.) You should write down when you give your animal medication.
- 3.) You should use the same scoop when feeding medicated and non-medicated feeds.
- 4.) You do not need to know your animal's vet.
- 5.) A dose is the amount of medication you should give your animal and how often you should give it.
- 6.) Every medication bottle has a label that you should read.
- 7.) You need a prescription to buy OTC (over-the-counter) drugs.
- 8.) Drug residue means that some medication can still be found in the animal's body.
- 9.) You are too young to be considered the one responsible for taking care of your animal.
- 10.) If your animal is sick, it is OK to give him some medication you had when another animal was sick.

ANSWERS TO GENERAL LIVESTOCK T/F JUNIOR

1. T
2. T
3. F You should use different scoops for med and non-med feeds
4. F You should know your animal's vet
5. T
6. T
7. F You do not need a prescription for OTC drugs
8. T
9. F You ARE the one responsible for your animal's care
10. F You should not use medication left-over from another animal

GENERAL LIVESTOCK T/F INTERMEDIATE

- 1.) It is OK to use medicine that is old and outdated.
- 2.) The first thing listed on a medication label is the name of the medicine.
- 3.) It is OK to keep medicated and non-medicated feeds together.
- 4.) Animal health records should be kept for at least one year.
- 5.) Prescription drugs require a vet's written permission to use.
- 6.) Poor animal identification could result in drug residue being found when you thought withdrawal time was over.
- 7.) You are not responsible if something goes wrong with your animal's medication.
- 8.) You should only use medication that is approved for your animal species and for the condition being treated.
- 9.) Many medications lose their potency when exposed to freezing or hot temperatures.
- 10.) The federal agency that is responsible for regulating medicated animal feed and most animal health products is the Ohio State Highway Patrol.

ANSWERS TO GENERAL LIVESTOCK T/F INTERMEDIATE

- 1.) F Medication should not be used after the expiration date
- 2.) T
- 3.) F They should be kept separate
- 4.) T
- 5.) T
- 6.) T
- 7.) F You ARE responsible for your project animal and its medication
- 8.) T
- 9.) T
- 10.) F The FDA (Food and Drug Administration) is responsible for regulating medicated animal feeds and animal health products

GENERAL LIVESTOCK T/F SENIOR

- 1.) VCPR stands for Vets Can Prescribe Rx drugs.
- 2.) Off-label use of a drug means the vet tells you other ways to use the drug besides what is written on the labels.
- 3.) Withdrawal time is the period of time that must pass between the last treatment and the time the animal will be harvested or that milk or egg products could be used for human consumption.
- 4.) The USDA determines whether a drug is OTC or Rx.
- 5.) Producers, parents and 4-H members are all responsible to produce a safe, wholesome food product.
- 6.) Drug residue can be caused by not following medication label directions.
- 7.) If drug residue is found in an animal going to slaughter, the 4-H member could be subject to a fine.
- 8.) Your vet can recommend extra label use of medicated feeds.
- 9.) Some feed additives can be legally added to feed rations to promote the animal's growth.
- 10.) It is OK to store medications in syringes.

ANSWERS TO GENERAL LIVESTOCK T/F SENIOR

- 1.) F VCPR stands for Vet/Client/Patient Relationship
- 2.) F That would be "Extra label use"
- 3.) T
- 4.) F The FDA (Food and Drug Administration) makes that determination
- 5.) T
- 6.) T
- 7.) T
- 8.) F Extra label use of medicated feeds is NEVER allowed
- 9.) T
- 10.) F This is not a proper storage method

Station 5
Drug Use
Notification Form

Intermediates & Seniors

DRUG USE NOTIFICATION FORM (DUNF)

Guidelines for Completion

Fill out this Drug Use Notification Form for the animal that you will bring to the county fair. Fill it out as your animal is right now. Items 1-6 and 8-9 (except for date) should remain the same up until the fair. Item 7 may change- if the condition of your animal changes for any reason.

- **EXHIBITION / FAIR NAME:** Jefferson County Fair
- **2 DIGIT FAIR CODE:** 55 (this is Jefferson County's code)
- **Sections 1 through 9 must be completed prior to show**

1. **4-H member's full name**
2. **4-H member's current complete mailing address and phone number.**
3. **Animal Identification Number:** this is the ear tag/tattoo, legband number that is used to identify the animal. This is not, for example, "animal #1 out of 3 animals". Also, pet names of animals are not an acceptable identification method for this section.
4. **Animal Species:** simply circle a species listed. If your animal species is not listed, please add it. Species that are most likely to be added are rabbit or poultry. "Dairy" is not a separate species, it is included in cattle.
5. **Animal description:** describe your animal with the breed, sex, and color. **BE SPECIFIC.** For example, "blue butt, female" indicates breed & sex of a hog. Or "boar cross, male, white" identifies a goat.
6. **Quality Assurance program** – place a check mark in the "yes" box to indicate you have completed the Quality Assurance requirement.
7. **Free of medication certification:** "when in doubt, write it down!"
 - a. if your animal is free of medication, place a check mark in this box. Then, proceed to #8 and sign the DUNF form. --- OR ---
 - b. if your animal has received medication within the past 30 days or has received medication with a withdrawal longer than 30 days before the start of the fair, the treatment record needs to be completed.
 - i. **Treatment date:** the exact date you (or the vet) administered the medication or medicated feed
 - ii. **Condition being treated:** specify why you are administering treatment. For example, "limp in back front right leg", or "allergic reaction", or "pneumonia".
 - iii. **Medication given:** be specific. For example "antibiotic" is too generic. You will need to include the full antibiotic name such as "omnibiotic"
 - iv. **Amount:** record accurate dosage rates, such as how many ounces or cc's. Dosage should be listed in the same units as the medication or medicated feed ID tag.
 - v. **Route:** specify how medication was administered. For example, "orally", "intramuscularly", "topical", "intravenously", or "subcutaneously"
 - vi. **Instructed withdrawal time:** this is the amount of time that the body metabolizes the medication and the medication is not longer present in the body. List this as the number of days. Be sure to read all the medication information to determine the proper withdraw time. Animal size, amount of medication and route of administration can all affect the withdrawal time.
 - vii. **Date withdrawal complete:** this is the date when the medication was administered, plus the withdrawal time, which is the date that the medication is not present in the animal.

For example, your hog was lame so on June 15 you administered 3 cc of banamine intramuscularly and it has a 4 day withdrawal time. So, the date the withdrawal is complete is June 19.

- viii. Veterinarian name: if the medication is not over-the-counter it must be prescribed by a veterinarian. If the animal was given a prescription medication, the veterinarian's name & address must be listed. Also, if the medication is over-the-counter but NOT labeled for the species being treated, it must also be prescribed by a veterinarian.

c. **Note on medications:**

- i. If the medication is not over-the-counter, it must be prescribed by a veterinarian. If the animal was given a prescription medication, the veterinarian's name and address must be listed below the treatment chart. If a veterinarian did not prescribe the medication for the animal, it is an illegal use of the medication!
 - ii. If the medication is over-the-counter, but NOT labeled for the species being treated, it must also be prescribed by a veterinarian.
8. Exhibitor signature, age, & date: 4-H member must sign here, not parent. Also, make sure to include your actual age, not your 4-H age. Remember to date the form.
 9. Parent/guardian signature: 4-H parent or guardian signs here attesting to the fact that the DUNF is complete and accurate. If the 4-H member is over 18 years old, a parent/guardian signature is not needed.

DRUG USE NOTIFICATION FORM (DUNF)

Sections 1 through 9 must be completed prior to show

EXHIBITION / FAIR NAME: _____

2 DIGIT FAIR CODE: _____

PRINT CLEARLY

1. EXHIBITOR/OWNER NAME _____

2. MAILING ADDRESS _____

Street, P.O. Box Number _____

City, State, Zip _____

EXHIBITOR

PHONE (____) _____

3. ANIMAL IDENTIFICATION
NUMBER (Tag, Tattoo #, Legband)

4. ANIMAL SPECIES [CIRCLE ONE]
CATTLE HOGS SHEEP GOATS
OTHER (Specify) _____

5. ANIMAL DESCRIPTION
(BREED, SEX, COLOR, ETC.)

6. I AM A JUNIOR FAIR MARKET LIVESTOCK EXHIBITOR AND I HAVE ATTENDED OR COMPLETED A QUALITY ASSURANCE PROGRAM DURING THE LAST 12 MONTHS OR I HAVE TESTED OUT OF A PROGRAM WITHIN MY AGE BRACKET.

YES ☐

NO ☐

7. ☐ I CERTIFY THE ABOVE ANIMAL TO BE FREE OF MEDICATION.

IF YOU HAVE CHECKED THIS BOX, SIGN BELOW AND DO NOT COMPLETE THE TREATMENT CHART.

☐ THE ABOVE ANIMAL HAS BEEN TREATED WITH A MEDICATION FOR WHICH THE WITHDRAWAL PERIOD HAS NOT ELAPSED.

Complete the treatment chart below:

TREATMENT DATE	CONDITION BEING TREATED	TREATMENT GIVEN				DATE WITHDRAWAL COMPLETE
		MEDICATION GIVEN (NAME OF MEDICATION)	AMOUNT (DOSE)	ROUTE (Oral, IV, SQ, etc.)	INSTRUCTED WITHDRAWAL TIME (# DAYS)	

IF THIS IS AN EXTRA LABEL OR Rx DRUG, A VETERINARIAN MUST HAVE PRESCRIBED THE MEDICATION.
LIST THE LICENSED VETERINARIAN'S NAME AND ADDRESS WHO PRESCRIBED OR DIRECTED THE TREATMENT.

VETERINARIAN NAME _____

STREET, P.O. BOX NUMBER _____

CITY, STATE, ZIP _____

8. EXHIBITOR/OWNER SIGNATURE _____

AGE: _____

DATE: _____

PARENT/GUARDIAN SIGNATURE _____

(REQUIRED IF EXHIBITOR IS UNDER 18 YEARS OF AGE)

DATE: _____

DISTRIBUTION by Records Official
OR DUNF (REV. 1/11)

WHITE FORM:

YELLOW FORM:

PINK FORM:

REVIEW UPON COLLECTION AND IMMEDIATELY FORWARD TO ODA

TO BE RETAINED BY THE DESIGNATED RECORDS OFFICIAL FOR ONE YEAR

TO BE GIVEN TO THE OWNER/EXHIBITOR

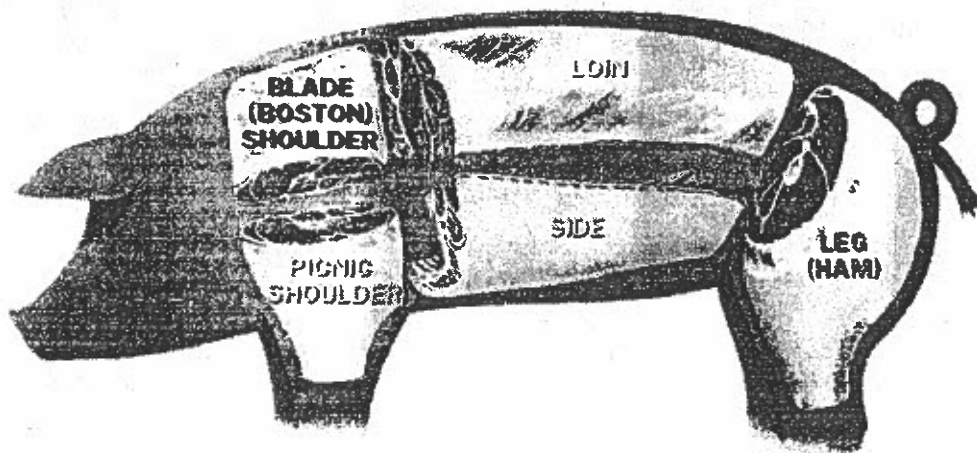
CHAMPIONS WILL BE REQUIRED TO COMPLETE A NEW DUNF TO BE SUBMITTED WITH URINE/HAIR SAMPLES TO THE TESTING LABORATORY

Station 6
Meat cuts
(Wholesale)

Seniors Only

Use this poster in conjunction with Meat Cuts - Identify Meat Cuts & Locations from Live Animal situation/task statement and/or Wholesale Cuts of Pork Identification tags

Wholesale Cuts of Pork



SWINE
LEARNING LABORATORY KIT

Assuring Animal Product Quality by Youth Producers
This material is based upon work supported by Extension Service,
United States Department of Agriculture, under special project
number 93-EFSQ-4096.

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Product distribution through the Ohio Agricultural Education Curriculum Materials Service

Charts and Diagrams

Station 7
Trip Around the
Fairgrounds
& Turn in Book

All Ages

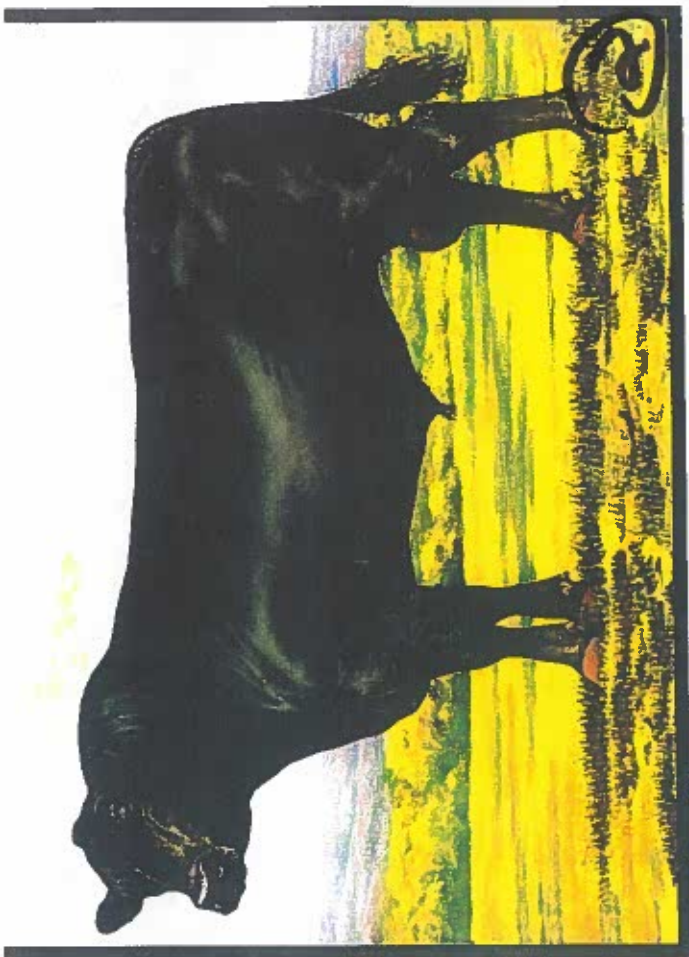
Trip Around the Fairgrounds

In this Skill-A-Thon station, you will be taking an imaginary walk around the Jefferson County Fair. On this walk, you will see many of the animals that you would actually see at the fair.

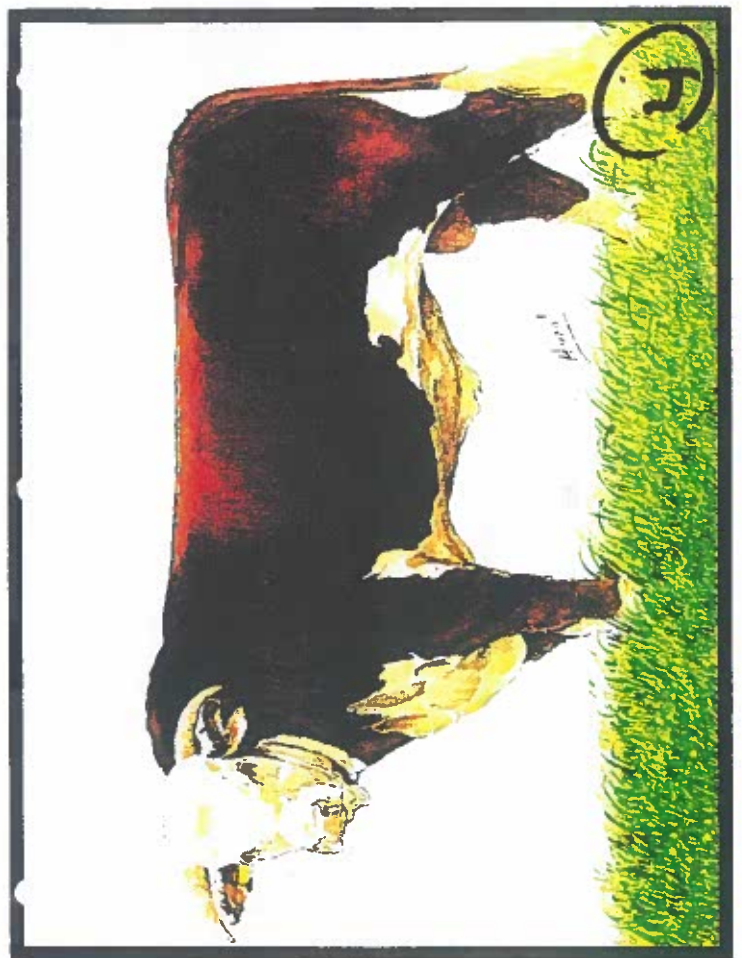
Your job is to identify eight of the animals you see. On your score sheet, you will have a list of 24 blank spaces. Identify the animal by putting the name of its breed on the correct number on the sheet.

You can only identify eight and you won't get any extra credit if you name more.

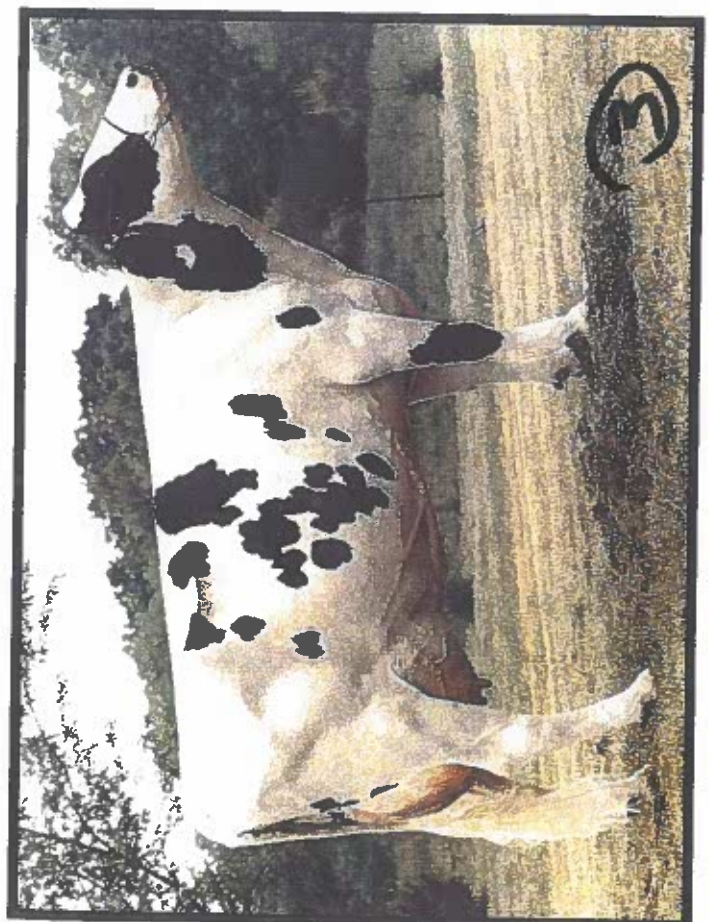
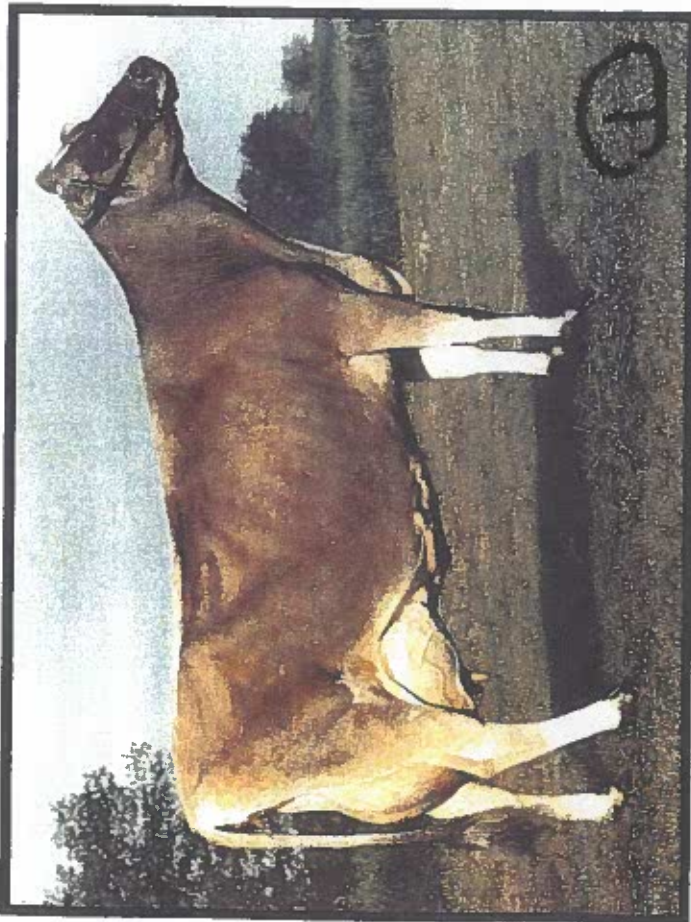
Good luck!



202



194



Holstein

This breed is the most popular of the dairy cows and also the largest. They are black and white, but may be red and white. They are known for producing the most milk of all the dairy breeds.

Hereford

This breed was developed in England and brought to the United States. They have red bodies with white faces.

Jersey

These dairy cows are the smallest cows in size and produce milk that is the highest in fat and protein. They are fawn colored with or without white markings.

Angus

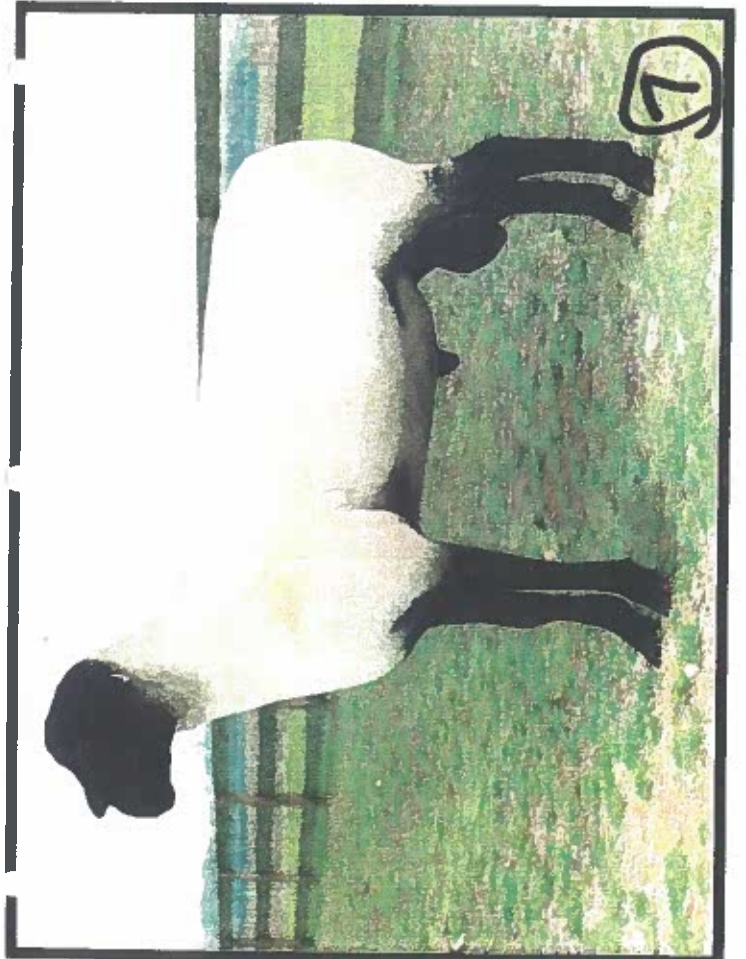
This breed originated in Scotland. They are polled with a black, smooth coat.



249



24



7

Suffolk

This polled breed with black head and legs has the most number of purebred registrations in the U.S. They grow quickly and are known for their meatiness.

2

Paint

This breed of horse originated in the United States. The name refers to its spotted or two-tone pattern- white with one additional color. They are used as stock, pleasure, race, or show horses.

8

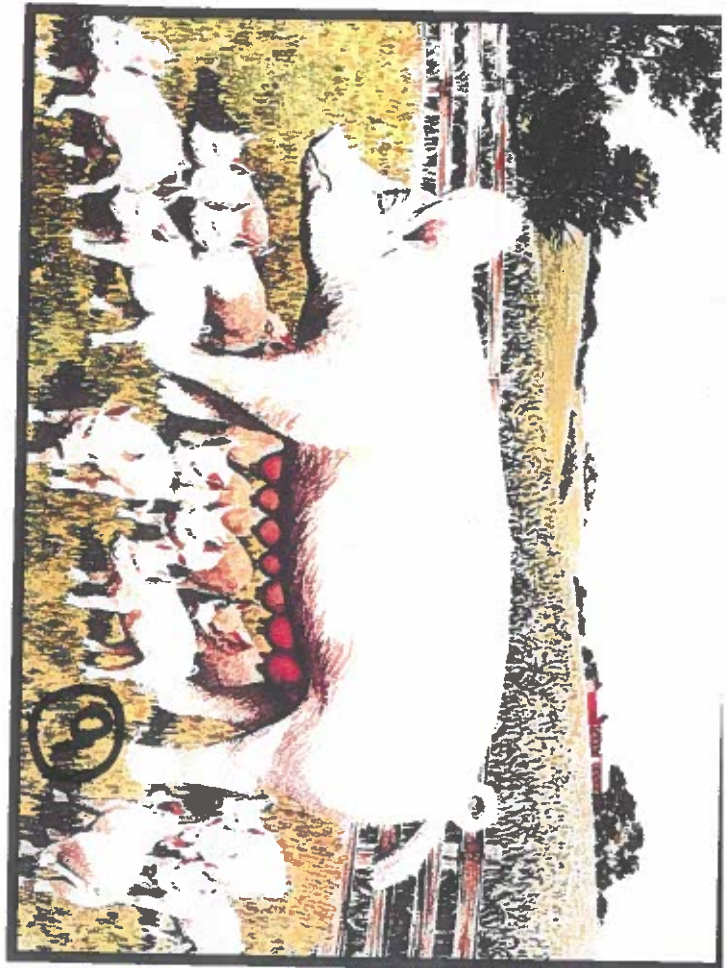
Boar

This breed is known because of their sturdy legs which allow them to move easily through rugged terrain and to withstand a wide range of climatic conditions.

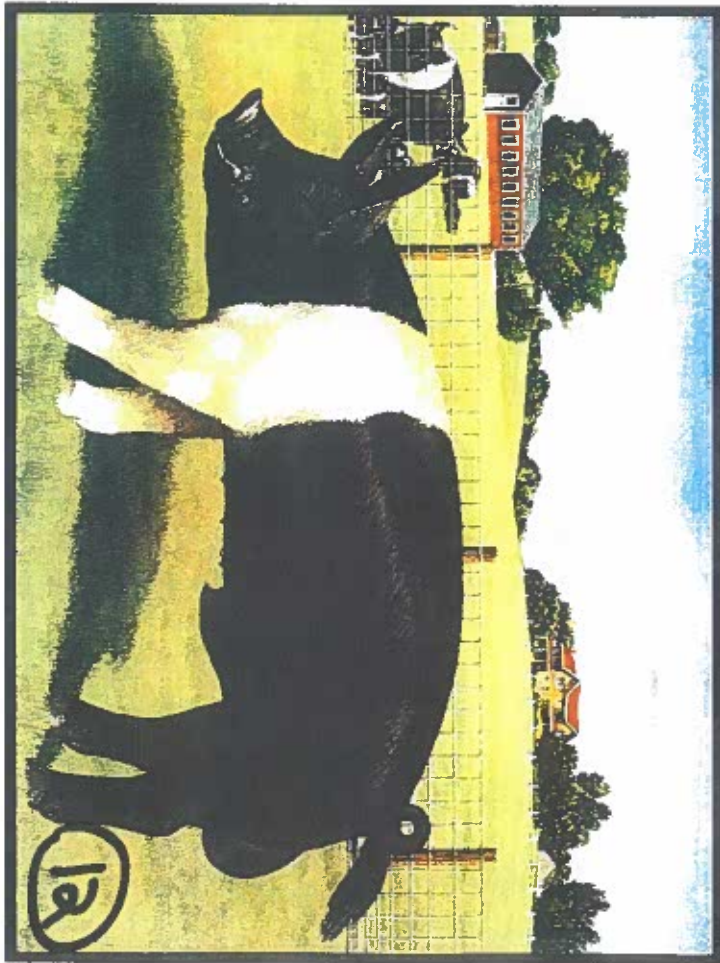
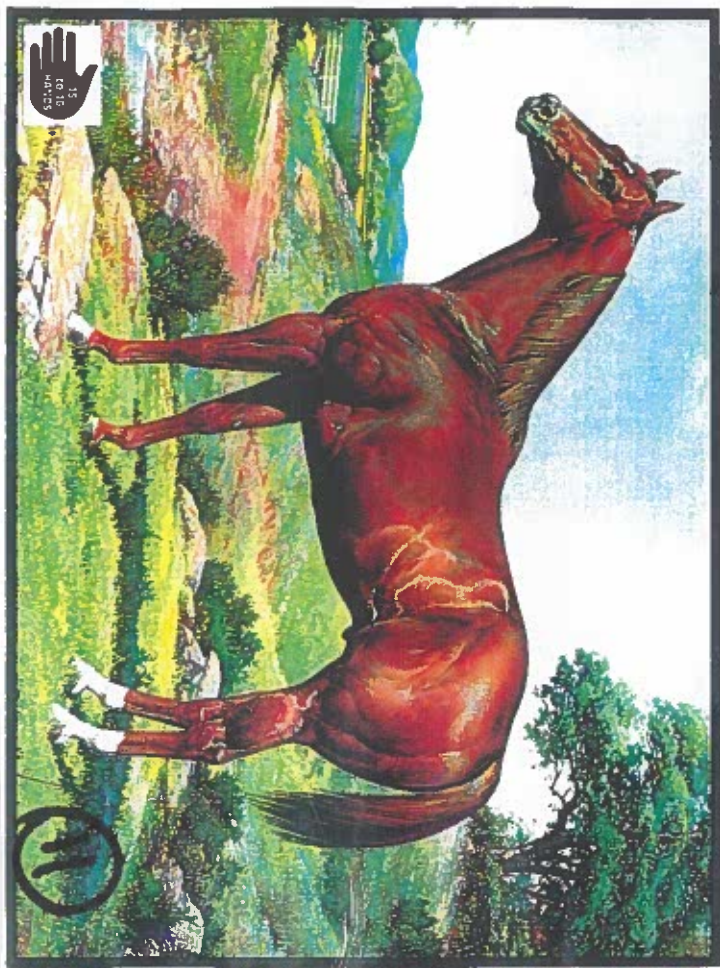
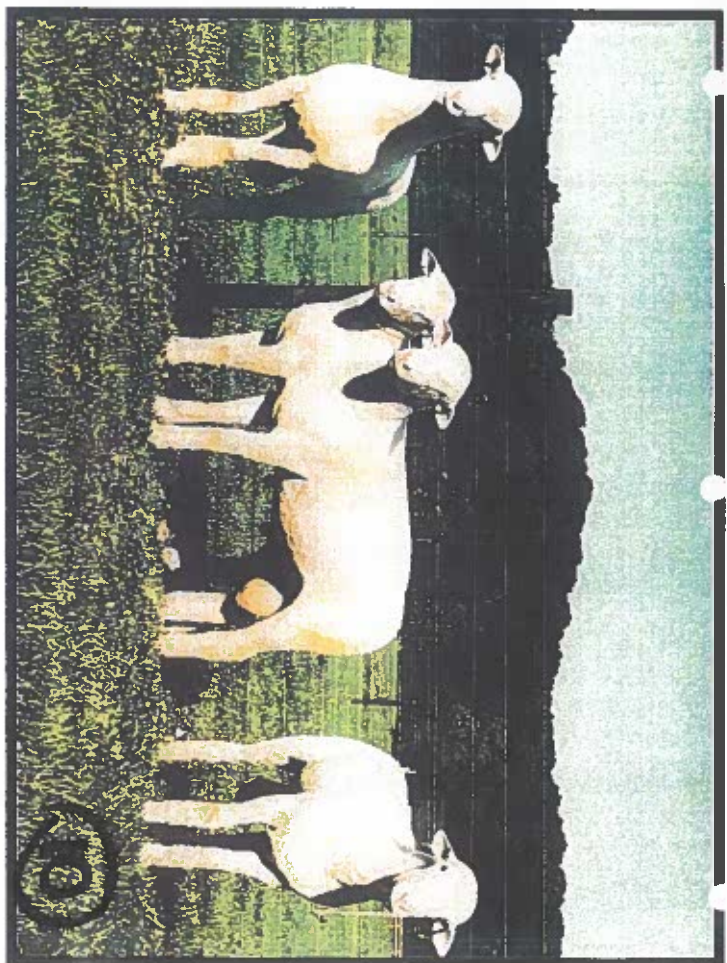
9

Pygmy

This dwarf breed of goat originated in Africa and the Caribbean. They are only 16-22 inches tall. They can be white caramel, caramel, gray agouti, black agouti, and charcoal agouti.



72



11

Quarter-horse

This breed originated in the United States and was named for its quarter-mile racing speed. They can be chestnut, palomino, black, brown, gray, or roan. They are powerfully built and quick on their feet.

12

Yorkshire

These animals have long, large-framed white bodies with erect ears. They produce large litters and are good mothers.

13

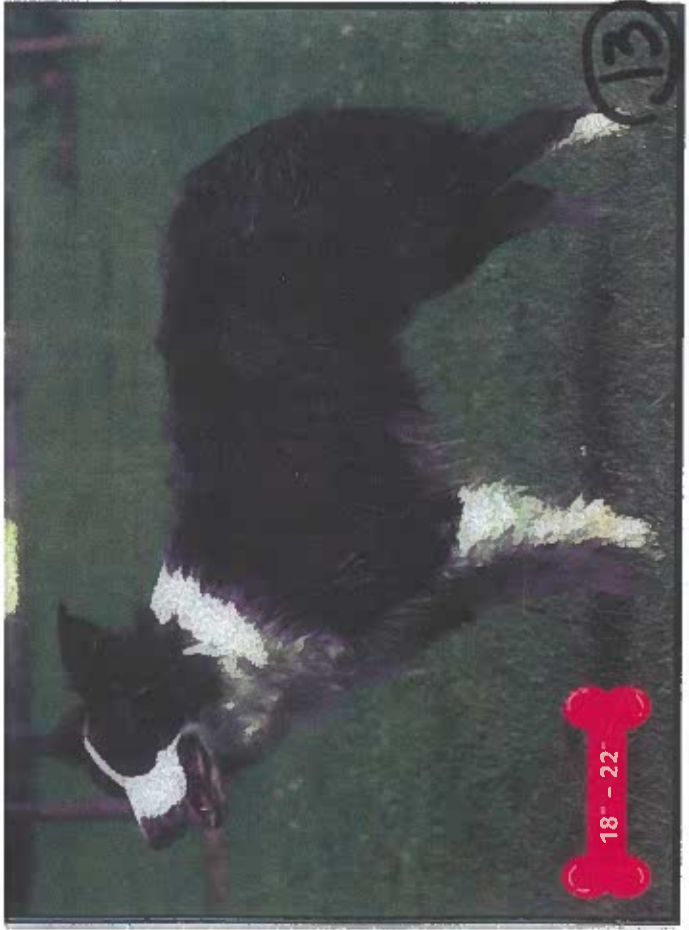
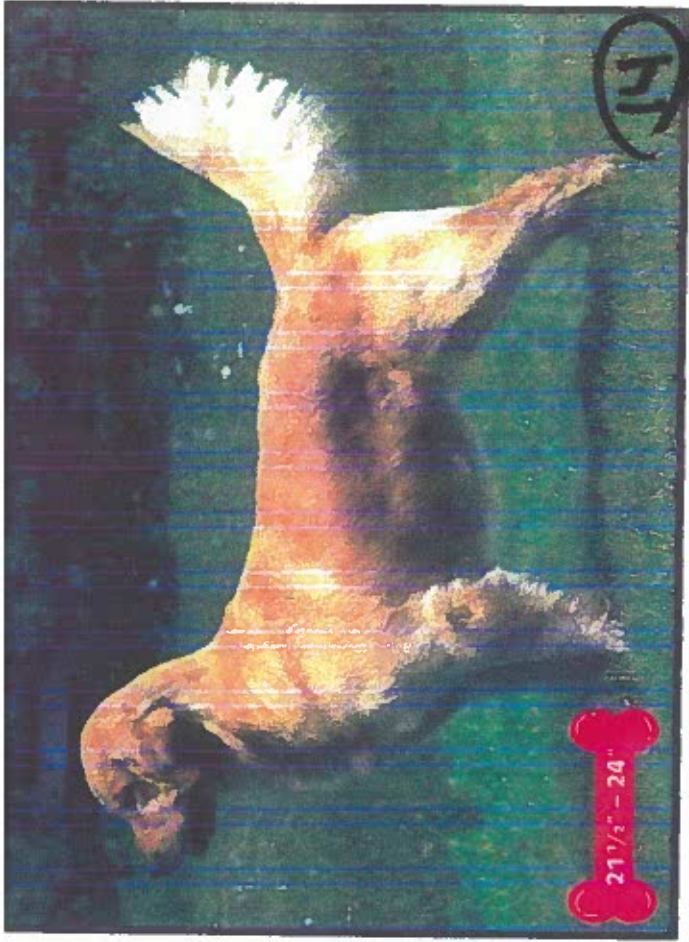
Hampshire

These animals have black bodies with a white belt around the shoulders and both front legs. They have erect ears and heavy muscles.

14

Dorset

This breed of sheep can be polled, scurred, or horned and are known for producing more than one lamb crop per year.



12

Cornish

This breed of chicken originated in England. Comb, wattles, and earlobes are bright red. Beak is short, stout and curved. Skin is yellow and plumage is white

13

Border Collie

This herding breed is black and white with or without tan points. They are 18 to 22 inches tall at the withers. They have an athletic build. They are intelligent, alert, and affectionate.

14

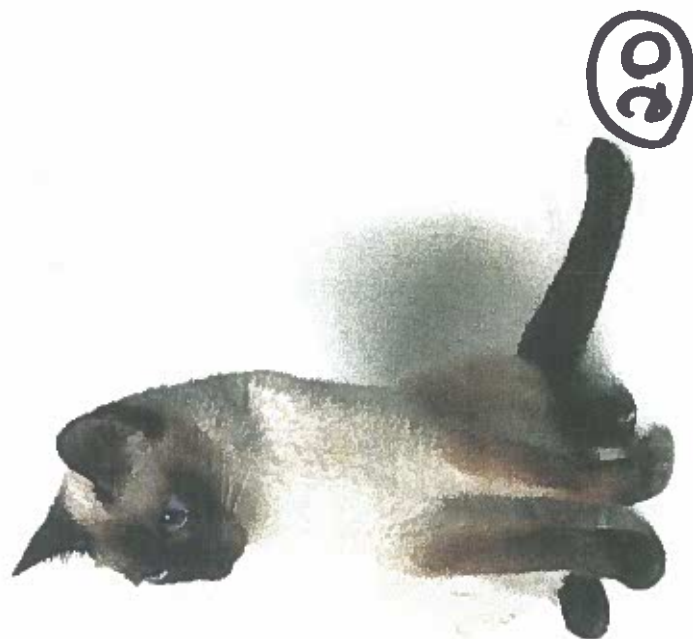
New Hampshire

This breed of chicken shows off its comb, wattles, and earlobes which are all bright red. They are competitive and can be aggressive. Skin is yellow and plumage is chestnut red.

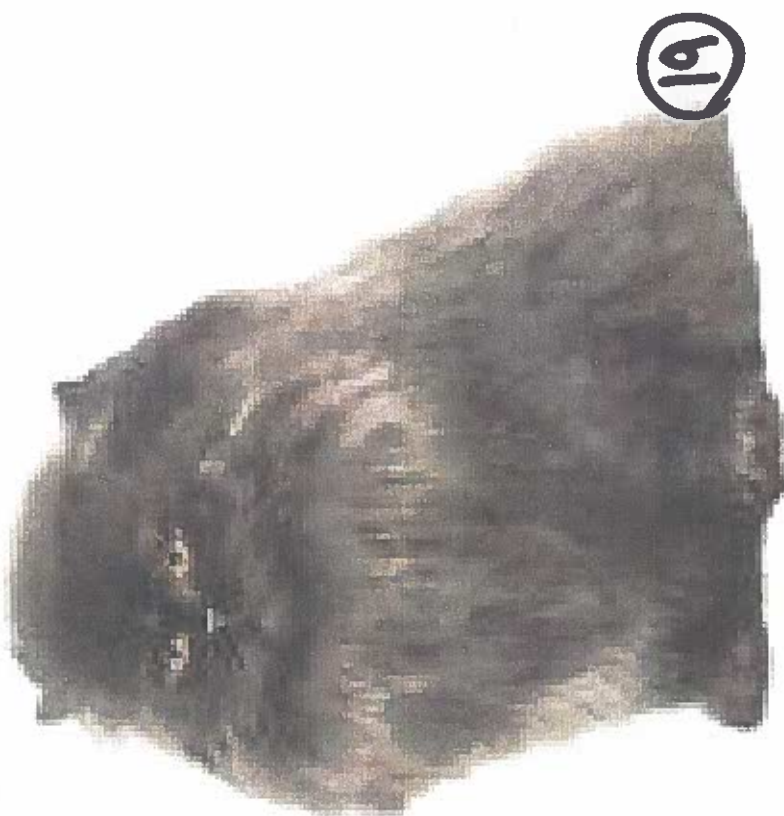
15

Golden Retriever

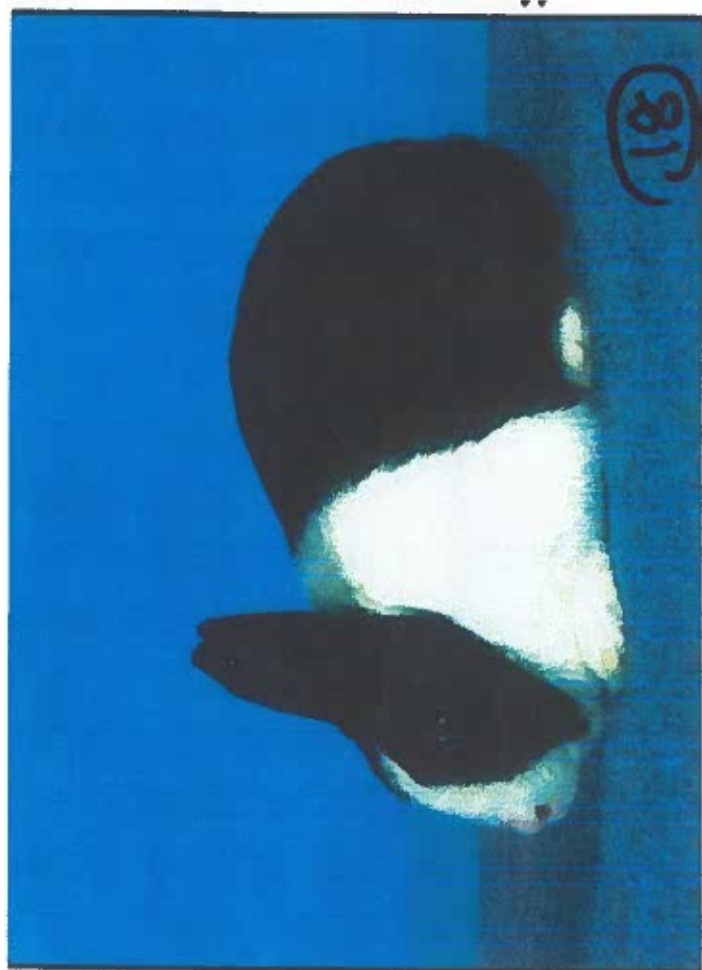
This sporting breed originated in England. The coat is rich, lustrous gold of various shades. They are gentle and loyal and serve as great pets. They are often used as guide dogs for the blind.



20



19



18



17

18

Persian

The Persian is a long-haired cat characterized by its round face and shortened muzzle. It has been the most popular breed of cat in the United States for many years.

50

Siamese

This is one of the most recognized of all the Oriental cats and the most popular of all short-haired cats. They have long slender bodies, a triangular face and are known for their blue eyes.

14

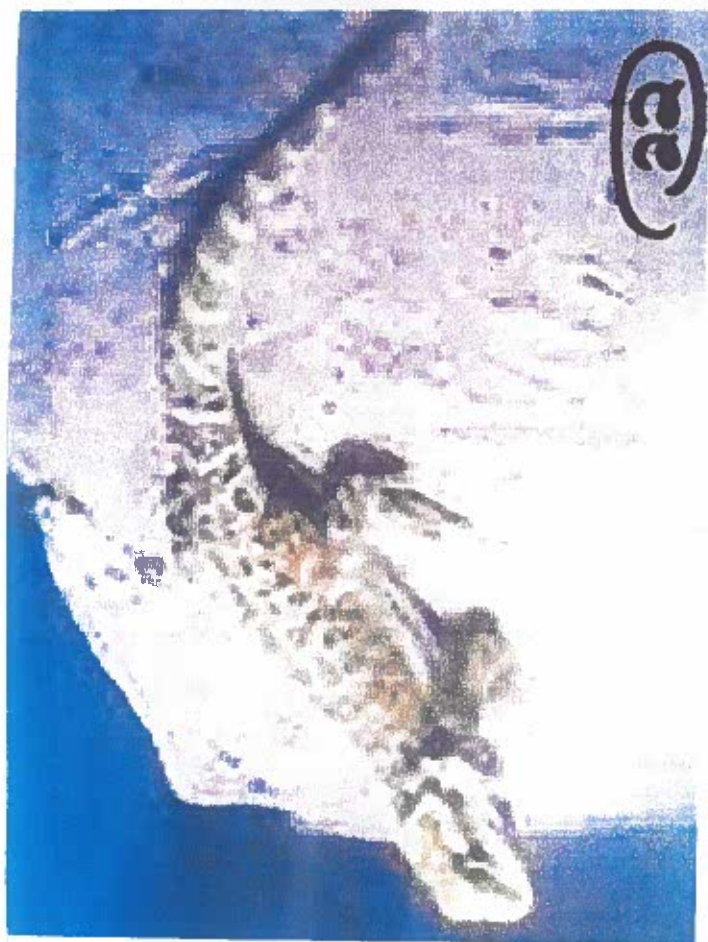
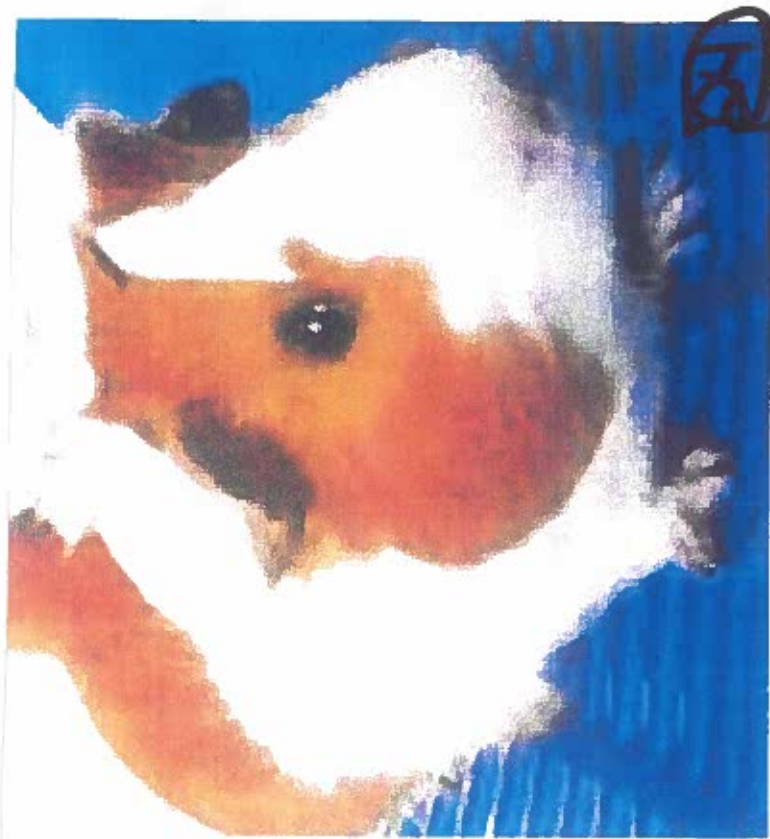
Holland Lop

This small breed has a massive head with long ears and a flat nose. They are small with a mature weight of only 3 to 4 pounds.

18

Dutch

This breed is usually black and white with a white blaze going from the ears to the nose. Mature weight is 3 ½ to 5 ½ pounds. They are exhibition use.



Chinchilla

Chinchilla are about the same size as a small to medium-sized rabbit. They can live 10-15 years. They are not very cuddly but they will jump on you if in the area you are in. They are nocturnal- up all night and sleep all day.

Guinea Pig

Guinea pigs are also called cavyes. They are rodents, not pigs. They are popular as household pets and are very easy to care for. Guinea pigs may wheek (whistle), purr, whine, squeal, chirp or chatter. They are considered fun as pets.

Garter Snake

The garter snake is one of our most common snakes. They can grow up to four feet long. Their color patterns vary, but they almost always have three yellow stripes and a checkerboard pattern between the stripes. They are harmless to humans.

Bearded Dragon

These are great lizard pets. They don't get too large, eat a wide variety of foods, are active during the day, and are gentle pets. They are inexpensive and readily available.

