

Poultry Leader Guide



4-H 

WASHINGTON STATE UNIVERSITY
EXTENSION

EM081E

Level 1



4-H Poultry Science Curriculum

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Parts of a Chicken

Poultry Science, Level I

What Members Will Learn . . .

ABOUT THE PROJECT

- Ten external parts of a chicken
- To relate the parts to their specific function

ABOUT THEMSELVES

- The body parts they have that are the same as chickens
- The body parts of poultry and humans that help them adapt to cold and heat

Materials Needed:

- Member Activity Sheet 1 - “Parts of a Chicken”
- Leader Key - “Parts of a Chicken”
- Labels with chicken part names
- Pencils, crayons, or color markers
- Member Activity Sheet 2 - “Color a Rainbow Chicken”
- Member Handout 1 - “Comb Types”

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

Approximately 30 terms are used to describe the different external (or outside) parts of a chicken. A knowledge of these parts is necessary to recognize the characteristics of the species, breeds, and varieties of poultry that make them different from each other. Knowing these parts will also help identify the sex of a chicken, and if a hen is laying or not.

The diagram shows the major external parts of a female chicken. The (1) **beak** is the mouthpiece of the bird. The lower part is hinged at the jaw and is movable; the upper part is attached to the skull. The (2) **comb** and (3) **wattles** are red, soft fleshy appendages on the head of the chicken. The size and redness of these appendages vary. A nonlaying hen has a small, dull comb and wattles; a layer has large, bright red comb and wattles. Different types of combs are inherited characteristics of the breeds and varieties. The single comb shown on the diagram is most common. Other common types are the V-shaped, rose, and pea combs. Chicken (4) **eyes** have color vision and show a preference for the violet and orange colors. They are slightly farsighted, which means they can see things better far away than close up. The color of the (5) **earlobe**, either red or white, depends on the breed. The (6) **ears** are small openings into the auditory canal protected by small feathers. The neck feathers

Leader Notes

Make a large picture by enlarging the diagram on member activity sheet “Parts of a Chicken.” Make part labels that can be placed on the actual part on the picture. Have members put part names on correct place on the picture. Have members write the names down on their copy.

Give members handout “Comb Types” and discuss.

Leader Notes

Give members “Color a Rainbow Chicken” to do at this session or to do at home for a review.

are called (7) **hackle** feathers on the male and (7) **neck** feathers on the female. The (8) **breast** is located in the front of the chicken. The breast (9) **keel** bone is the lower portion of the skeleton. The back area on the male is called the (10) **saddle** and the (10) **cushion** on the female. The (11) **tail** area has different types of feathers depending on the sex of the bird. For example, the male has long (12) **sickle** feathers. The (13) **wing** has various types of feathers that are not easily identified in the standing bird. However, when the wing is spread, the long (14) **flight** feathers and the (15) **covert** feathers which cover the base of the flight feathers are distinguishable. The (16) **thighs** are not easily seen as they are located along each side of the body and are covered with feathers. The lower part of (17) **leg** (drumstick) is also covered with feathers and bends at the (18) **hock** joint (ankle). The (19) **shank** which is the chicken’s foot is covered with scales. The shank may be clean or feathered depending on the breed and variety. The (20) **spur** is found on the male bird, and is a bony growth which grows from the rear inside of the shanks. A chicken walks on its (21) **toes**. Most chickens have three toes projecting forward and one toe projecting back. (A few breeds have five toes.)

Function of Parts

In the summer when it is hot, people perspire to release the excess heat from their bodies. Birds do not have sweat glands like humans, but the comb and wattle areas allow heat to escape from the bird. What other things do birds do to keep cool? They also pant, spread their wings, and lie on cool surfaces, such as the ground.

How do you stay warm in winter? During winter, people wear more clothing to protect themselves from the cold temperatures. How do you think birds keep warm? The feathers act as insulation against cold temperatures. When a bird is exposed to cold, its feathers will stand up to help conserve body heat. Birds also shiver like humans when they get cold. Shivering helps produce additional body heat.

DIALOGUE FOR CRITICAL THINKING

1. How would you describe a chicken?
2. What parts are unique to a chicken? (Unique means no other species have them.)
3. What are some parts of a chicken that are like those of people?
4. What parts of chickens help them adapt to cold weather? Hot weather?
5. How do people stay warm in winter and cool in summer? Are any of these ways similar to what poultry do?

GOING FURTHER

1. Draw pictures of the heads of a chicken, turkey, and duck, and label the parts.
2. Obtain an adult male and female chicken and compare differences in appearance of feathers, comb and wattles.
3. Observe other domesticated breeds of poultry and wild birds and compare differences in their appearance.
4. Identify the proper names for young and adult chickens, turkeys, ducks, and geese.

PARTS OF A CHICKEN
POULTRY SCIENCE, LEVEL I
Activity Sheet 1

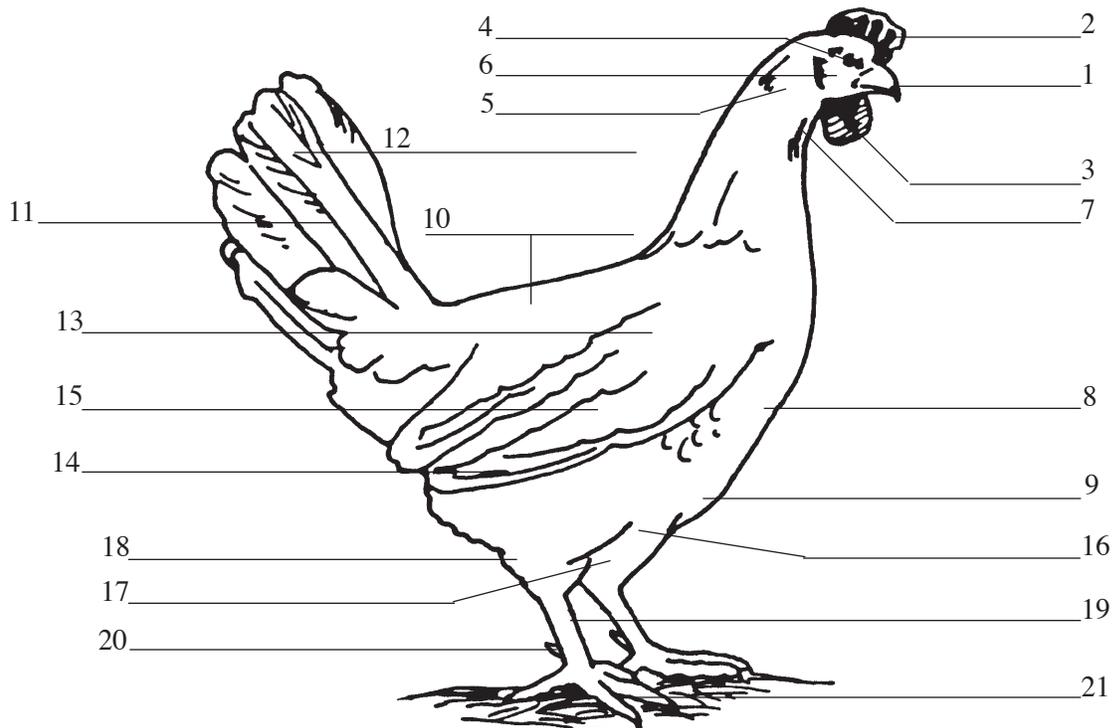
Parts of a Chicken

Write in the part name on the matching blank.

Tail
 Comb
 Hackle feathers (male)
 or neck feathers (female)
 Earlobe
 Covert feathers
 Spur (male)
 Hock joint

Ear
 Eyes
 Tail feathers
 Flight feathers
 Thigh
 Leg
 Keel bone

Breast
 Shank
 Wattles
 Beak
 Back (saddle - male)
 Toes
 Wing

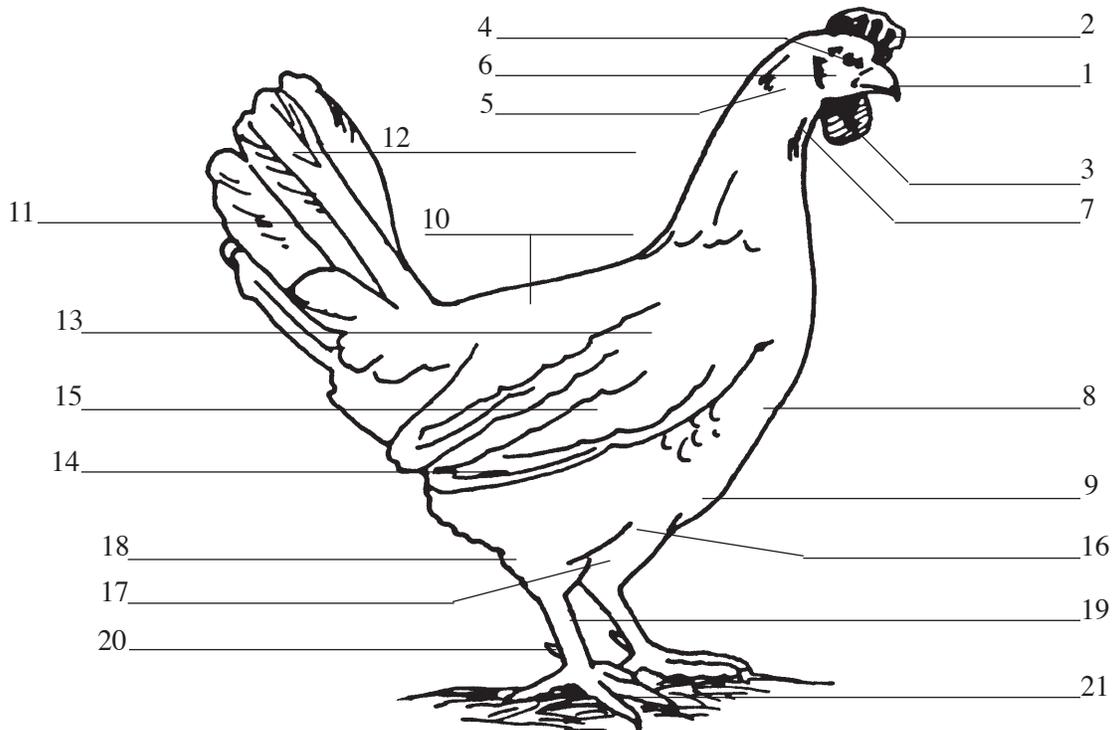


PARTS OF A CHICKEN
POULTRY SCIENCE, LEVEL I
Leader Key for Activity Sheet

Parts of a Chicken

Key to Chart:

- | | |
|--|---------------------|
| 1) Beak | 11) Tail |
| 2) Comb | 12) Tail feathers |
| 3) Wattles | 13) Wing |
| 4) Eyes | 14) Flight feathers |
| 5) Earlobe | 15) Covert feathers |
| 6) Ear | 16) Thigh |
| 7) Hackle feathers (male)
or Neck feathers (female) | 17) Leg |
| 8) Breast | 18) Hock joint |
| 9) Keel bone | 19) Shank |
| 10) Back - saddle (male)
or cushion (female) | 20) Spur (male) |
| | 21) Toes |



PARTS OF A CHICKEN
POULTRY SCIENCE, LEVEL I
Member Handout 1

Comb Types

Different comb types of chickens



SINGLE COMB



V-SHAPED COMB



PEA COMB



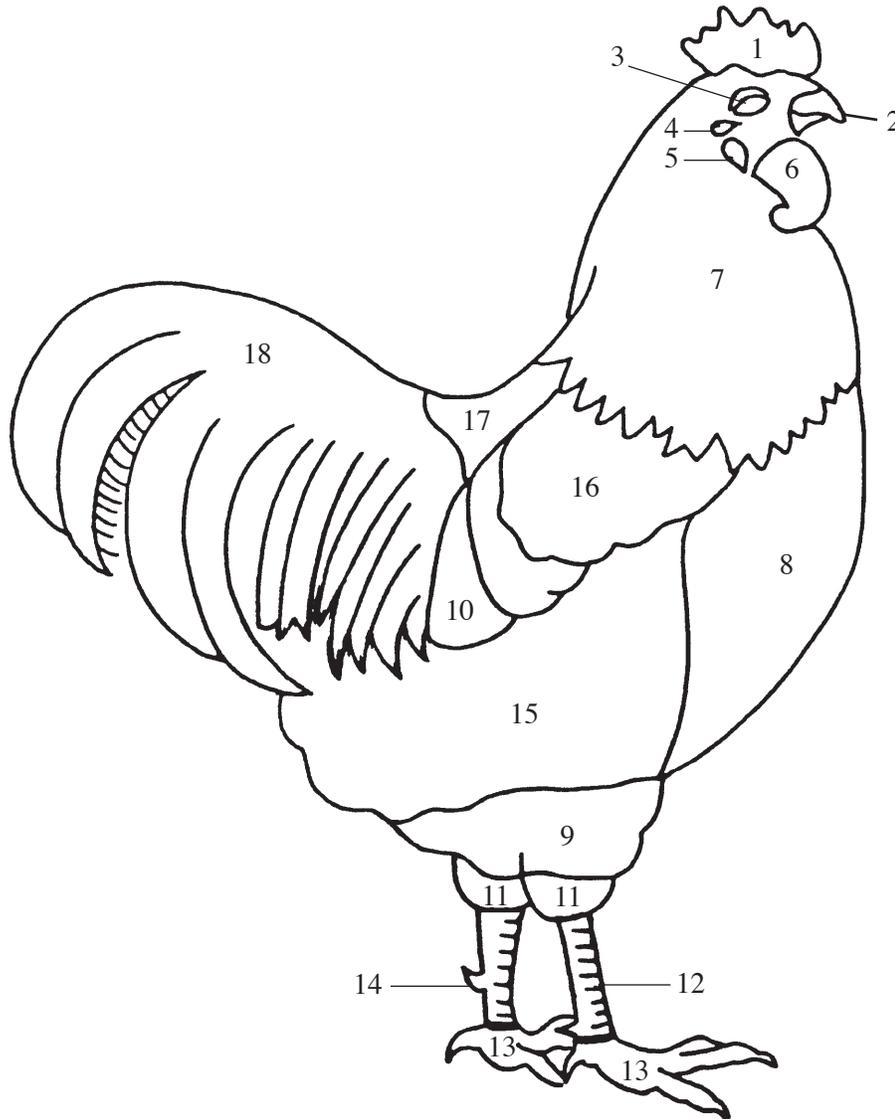
ROSE COMB

PARTS OF A CHICKEN
POULTRY SCIENCE, LEVEL I
Activity Sheet 2

Color a Rainbow Chicken

Color the parts according to this list.

- | | | |
|-------------------|------------------|------------------------|
| 1. Comb-red | 7. Neck-yellow | 13. Foot & Toes-yellow |
| 2. Beak-yellow | 8. Breast-orange | 14. Spur-orange |
| 3. Eye-blue | 9. Thigh-purple | 15. Abdomen-blue |
| 4. Ear-green | 10. Wing-purple | 16. Shoulder-green |
| 5. Earlobe-purple | 11. Hock-red | 17. Back-red |
| 6. Wattles-red | 12. Shanks-green | 18. Tail-yellow |





Name that Bird

Poultry Science, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- To identify six species of poultry
- The differences and similarities between species

ABOUT THEMSELVES:

- The similarities and differences of people from various ethnic backgrounds
- The diversity of human ethnic groups in speech and where they live

Materials Needed:

- Pictures of poultry species (chicken, turkey, duck, goose, pheasant, guinea, peafowl, pigeon, quail)
- Cards with species names
- Large sheets of paper
- Magic markers or colors
- Activity Sheet 3 - "Name That Bird"

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

Poultry is a term used to define those species of birds that humans have domesticated (tamed and bred) for the purpose of providing eggs, meat, and recreation. A *specie* is a group of birds of the same kind or form. The most common species of poultry are chickens, turkeys, ducks, and geese which are kept primarily for eggs, meat, or show. Other species like the guinea, peafowl, pigeon, quail, and pheasant primarily serve humans by their beauty, companionship, and sport.

What species have you seen? How would you describe them to someone else?

Today you'll have the opportunity to identify each of these species of poultry. First of all, let's find out how many species you can identify already.

Identifying Species of Poultry

I have nine pictures of different species of poultry. Your job is to match the species card to the correct picture.

Now let's match the names on your activity sheets and talk about each of these species.

Leader Notes

Have members list species with descriptive words for each on large sheet of paper. If group is large, divide into groups of 2-3. Have each group report or discuss their lists.

Have members match cards with names to correct picture of bird. Let them check their answers at end of exercise.

Hand out activity sheet "Name That Bird" for them to fill in. Point out the physical features of the birds in the pictures as you describe them.

Leader Notes

List these features on a chalkboard or large paper as the members list or report back. This information should be used as a check of their group listings, not as a lecture! Use information for other species (Turkey, Ducks, etc.) in the same manner.

CHICKENS are the most common species of poultry raised throughout the world. Chickens, like all other birds, have feathers and wings. Chickens come in many sizes, shapes, and colors. What are some colors of chickens that you have seen?

Their feathers may have stripes, spots, patches, solid colors, two colors, or a variety of colors depending on the breed. An adult chicken may weigh as little as $1\frac{1}{2}$ pounds or as much as 18 pounds. Chickens have plump bodies and small heads with sharp beaks. Chickens have several fleshy growths on their heads that most other birds do not. The flaps of loose skin hanging down from the throat are called **wattles**. On top of the head is a reddish-pink crest, called a **comb**. The comb and wattles are red because they have a rich blood supply. **Earlobes** grow on the side of the head. The earlobe color may be red or white, depending on the breed of chicken. Feathers cover most of the body of a chicken, and even the shanks (lower legs) and feet of some birds. Usually the shanks and feet are covered with scales. Roosters have an extra spike or spur sticking out from the rear inner side of the legs. Chickens have claws on their toes, which they use to defend themselves against an enemy, and to dig in the soil for insects and seeds to eat. Even though chickens have wings to fly, their wing muscles are poorly developed, so they can only fly a short distance at a time. Chickens fly mainly to escape enemies and to reach a perch on which to roost at night. Chickens are usually very noisy. They constantly cluck and squawk. The male chicken (rooster) has a distinctive sound of his own, sometimes referred to as crowing. When do you think roosters usually crow? What time of day do roosters do the most crowing?

TURKEYS are large birds that can weigh as much as 50 pounds or more. They are raised primarily for meat production. Have you ever eaten turkey? When?

The head and neck of turkeys are red and featherless. A long, loose piece of skin called a wattle extends from beneath the lower jaw along the neck. At the base of the neck are small, wart-like structures called **caruncles**. Male turkeys are called toms. If you look closely you will see that they have a beard-like tuft of coarse hair hanging from the center of the breast. The color of domestic tom turkeys depends on the variety. Adult female turkeys, called hens, are dull in color and have no beards. They are smaller than the adult male turkeys. Their legs are similar to those of chickens, and are covered with scales. The tom turkey also has spurs on his legs like the male chicken. The vocal sound that we associate with a turkey is the gobbling call which the male makes.

DUCKS are classed as waterfowl and can live in many areas. Ducks are raised for meat and egg production. They are related to geese and swans. They can live under a variety of climatic conditions. Ducks have waterproof feathers and webbed feet (the toes on each foot are connected by flaps of skin). They have a heavy body, short neck, short wings, and a flat

broad bill. Their bills have a hard horny growth at the tip called a **beak**. Ducks are known to be very vocal. The voice of the female is a loud, rather flat quack. The voice of male duck makes either a nasal sound or a whistle followed by a grunting sound.

GEESE are also classed as waterfowl and are related to ducks and swans. People raise geese for meat and egg production, and as weeders, show birds, or farm pets. They have flattened bills; a long neck; water-repellant feathers; long, pointed wings; a short tail; short legs; and webbed feet. Scales cover the goose's legs. Their webbed feet make them good swimmers, but they also adapt well to living on land. Their faces are feathered. Geese are larger than ducks and smaller than swans. Geese communicate by honking, instead of quacking or whistling. The long wings of wild geese enable them to fly great distances. They are very graceful in flight and some kinds of geese can fly more than 1,000 miles without stopping to rest. All geese are migratory birds, which means that they fly north in the spring and south in the fall. Have you ever seen a flock of geese fly in the sky? What direction were they flying? In what kind of formation were they flying?

PHEASANTS are generally classed as game birds, since people hunt pheasants for sport and for their tasty meat. People also seek them for their gorgeous, long tail feathers. They are medium to large in size and are closely related to the domestic chicken. Most pheasants have a short, stout beak and a long tail. Some pheasants have combs and wattles similar to those of chickens. The male pheasants are colorful with patterns of brightly colored feathers. The females usually have dull brown and tan feathers with black markings. Pheasants can fly, but only for short distances. They may reach speeds of 40 mph. The male pheasant communicates with cackles, crows, screams, and whistles. The call of the hen is limited mostly to clucks and peeps.

GUINEA fowl are close relatives of the pheasant. The head and neck is bare and a bony ridge or helmet, covers the top of the head. The most common guinea, the pearl, has gray feathers with small white spots. Guineas are known to make good "watchdogs" because of their usefulness in protecting the farm flock from predators by their loud, harsh cries and bad temper. They destroy insects in the garden. They do not scratch and therefore are less destructive than chickens. The cry of the female sounds like "buckwheat, buckwheat" or "put-rock, put-rock" and is quite different from the one-syllable shriek of the male.

PEAFOWL are mainly ornamental birds (birds to look at). Peafowl are one of the showiest of all birds because of their great size and beautiful feathers. They are related to the chicken and pheasant family. The most popular bird, the India Blue's feathers are colored either blue, white, or green with blue being the most common. The male peafowl is called a peacock and may grow almost as large as a turkey. Its breast feathers are colored metallic greenish-blue with purplish-blue underparts. They have

Leader Notes

a long train of greenish feathers brilliantly marked with bold spots that look like eyes. These long feathers grow from the back and not from the tail. The train of feathers may be five times as long as the bird's body. When the male peacock spreads the feathers on his back, they form into a beautiful fan. In contrast, the female peafowl does not have a train and is more dull in color. Peafowl are regal, proud, and desire attention. The males are inclined to be aggressive and not only attack other fowl and small animals, but also have been known to fight their reflections in mirrors or shiny automobiles. Both the male and female produce a piercing, squawking, powerful cry, especially during the mating season. Peafowl choose to roost in a tall tree or on top of a building.

QUAIL are a type of small game bird that is often hunted for food or sport. Most adult quail are 6 to 8 inches long. The feathers of quail are colored in shades of brown, tan, or gray that blend in with the environment of a pasture or woodland in order to protect them from enemies by making them hard to see. The voice of a quail sounds like a squawk.

After characteristics or features are listed for each species, list similarities, differences, and discuss. Example—See how many members can duplicate the sound of each species.

PIGEONS are very versatile birds. They are used for the sport of racing, as flyers and performers, for show, for meat production, and in some cases to carry messages. The term pigeon is used to name any bird in the pigeon and dove family. The larger birds are called **pigeons** and the smaller birds are called **doves**. Pigeons have a plump body, a small head, and short, sturdy legs. Because pigeons have large flight muscles in their breast, they are powerful and can fly at fast speeds. Most pigeons measure from 10 to 15 inches long. However, the smallest of the species grows about 6 inches long and weighs about 1 ounce. The feather colors of pigeons are usually black, blue, brown, white, or gray. Pigeons drink in a way that is very unusual from other poultry birds. They stick their beak in the water and suck the liquid through their beak like a straw. Pigeons communicate through cooing sounds.

DIALOGUE FOR CRITICAL THINKING:

1. What are some of the characteristics that help you identify a poultry species? (size, beak or bill, feathers, sounds made, etc.)
2. What species are classified as waterfowl? (geese, ducks)
3. What characteristics are similar for most poultry species? Different?
4. What are characteristics that are similar for humans?
5. What characteristics are different in people? How do these differences reflect where they live or the language they speak?

GOING FURTHER

1. Read a book or magazine on poultry and share what you learned at the next project meeting.
2. Visit a poultry farm or zoo and observe the differences in the species.

NAME THAT BIRD
POULTRY SCIENCE, LEVEL I
Activity Sheet 3

Name that Bird

Draw a line from the name of the poultry species to the correct picture.

Quail

Duck

Chicken

Pheasant

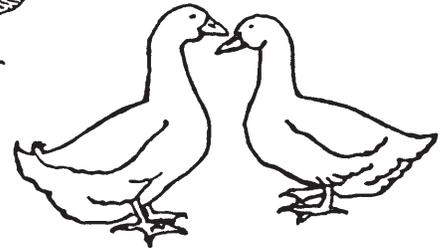
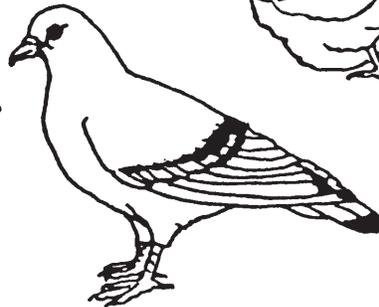
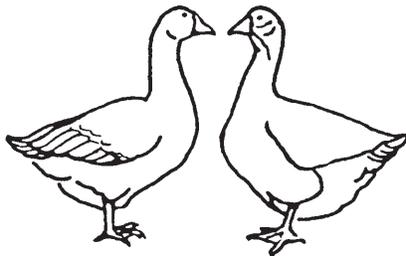
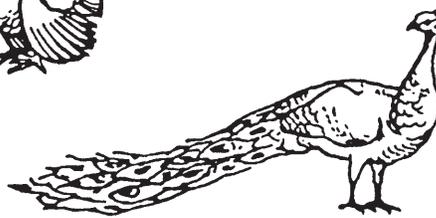
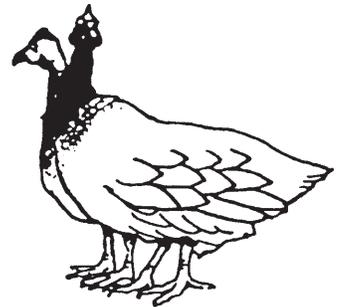
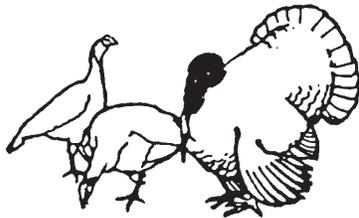
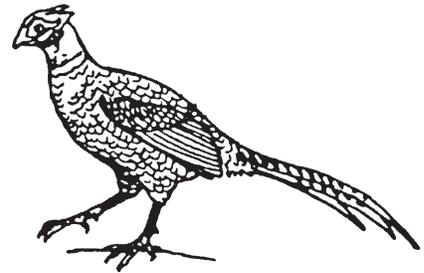
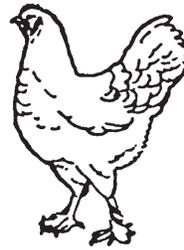
Turkey

Goose

Guinea

Pigeon

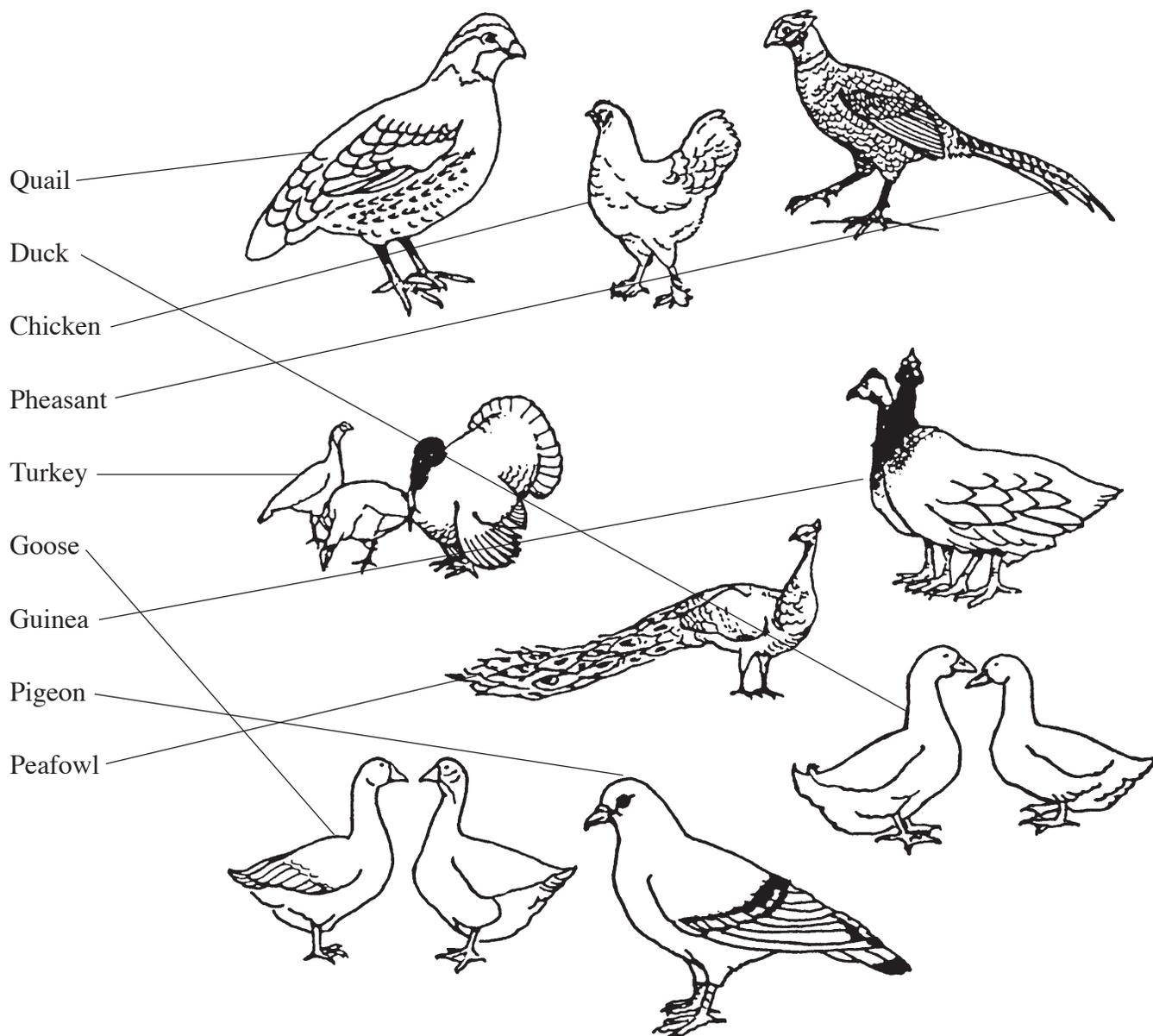
Peafowl



NAME THAT BIRD
POULTRY SCIENCE, LEVEL I
Leader's Key

Name that Bird

Draw a line from the name of the poultry species to the correct picture.





Poultry Terms of Different Species

Poultry Science, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- Five common chicken terms
- Five common turkey, duck, and goose terms
- Five general terms of various poultry species

ABOUT THEMSELVES:

- Their feelings about using cards and matching to learn
- How they feel about their ability to identify parts of live things

Materials Needed:

- Pictures or live birds
- Note cards with poultry terms
- Member Handout 2 - "Common Poultry Terms"

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

Leader Notes

Knowing the correct poultry terms is important in poultry projects. The *American Standard of Perfection* lists the terms used to describe the external (or outside) physical characteristics of poultry. Knowing these terms is essential to the identification and judging of exhibition and production types of poultry, selection and preparing birds for show, giving demonstrations and understanding how judges judge poultry.

Use the "*Standard of Perfection*" if you need terms in addition to those in this lesson.

CHICKEN TERMS

Approximately 30 terms are used to describe the different external parts of a chicken. The major terms are shown on the illustration.

The **beak** (a) on a chicken is pointed because the chicken is a grain eater. The **comb** (b) is used to identify breeds and varieties. Common comb types are single, rose, and pea. The **earlobes** (c) are patches of smooth skin located below the ears of the bird. Earlobe color is either white or red and is used for breed identification. The **wattles** (d) are fleshy appendages attached to the lower edge of the head. The feathers on the neck of the chicken are **hackles** (e) on the male and the **neck** (e) feathers on the female. The **main tail** (f) feathers arise from the tail head of both male and female chickens. The **sickle** (g) feathers are the long, flowing feathers on the male birds. The **saddle** (h) feathers are those that flow from the back down each side of the bird. The **hock** (i) is the joint

Leader Notes

between the drumstick and the leg or **shank** (j). The **spur** (k) is a bony projection arising from the inside of the bird's legs. The spur is prominent in the male and is used for fighting.

TURKEY TERMS

The **snood** (a) of the turkey is similar to the comb of a chicken. It is larger in the tom than hen. It becomes enlarged during the tom's mating ritual. Sometimes it becomes injured when toms fight, which allows disease organisms to enter the bird's body. The **caruncle** (b) is reddish, fleshy material on the naked portions of the head, face, and neck of the turkey and Muscovy duck. It is similar to the wattles on the chicken. The **beard** (c) is a small tuft of long, coarse, black hairs projecting from the upper part of the breast of a tom turkey.

DUCK TERMS

The **bill** (a) is the horny formation projecting from the head of waterfowl. It consists of the upper and lower mandibles which form the forward mouth parts. The **bean** (b) is a raised hard, bean-shaped projection on the tip of the bill of waterfowl. Sometimes the bean is removed from ducks to prevent them from seriously harming or killing each other.

GOOSE TERMS

The head of a goose is different from the head of a duck because of the presence of a **dewlap** (b). This is a loose fold of skin under the rear of the **bill** (a) that extends along the throat area. Its absence constitutes a disqualification in some breeds of geese such as the African and Toulouse.

Matching Game: Make up two sets of cards with a term on one side and its definition on the other. Use one set with the terms showing and the other set with the definitions showing. Use terms from this lesson. Give each group of two or three 4-H'ers about 10 terms and definitions to match. Have them check their matchings by turning the cards over. Ask each group to discuss one or two terms and tell how they would use the terms in a sentence. After 4-H'ers have completed this activity, use a live bird or picture to point out what the terms describe.

GENERAL TERMS

Proper terms for common species of domesticated poultry.

Species	Young of either sex	Mature Male	Mature Female
Chicken	Chick	Cockerel* Cock	Pullet* Hen
Duck	Duckling	Drake	Duck
Goose	Gosling	Gander	Goose
Guinea	Keet	Cock	Hen
Peafowl	Chick	Peacock	Peahen
Turkey	Poult	Tom	Hen

* Terms for male and female chickens, respectively, that are less than one year of age.

DIALOGUE FOR CRITICAL THINKING

1. What terms are easy to remember?
2. What term was the most difficult?
3. What part of a bird do you find the most unusual or different?
4. What was the part or term most often missed?
5. What other experience have you had where you had to learn parts or terms?
6. Do you like to do matching and/or flash cards? Why? Why Not?
7. What will it mean for you to be able to identify various poultry parts?
8. Why do you think it is important to know parts of birds, animals, people, or other items?

GOING FURTHER

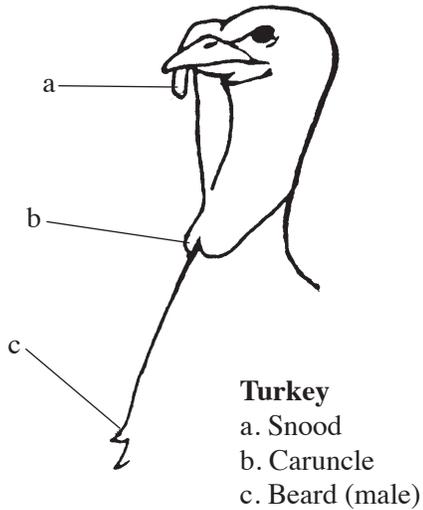
1. Attend a poultry show and identify parts on all species.
2. Share poultry terms with your class at school.

COMMON POULTRY TERMS OF DIFFERENT SPECIES

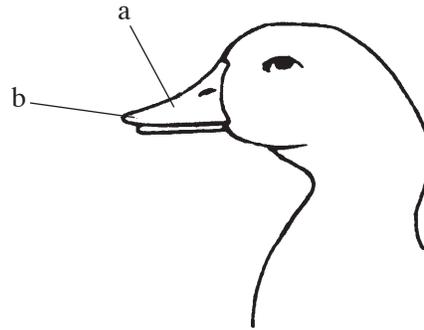
POULTRY SCIENCE, LEVEL I

Member Handout 2

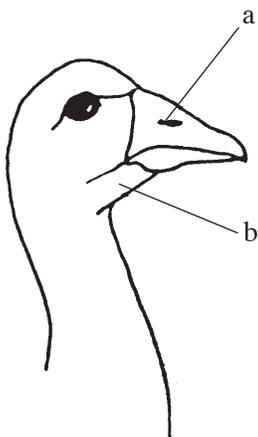
Common Poultry Terms



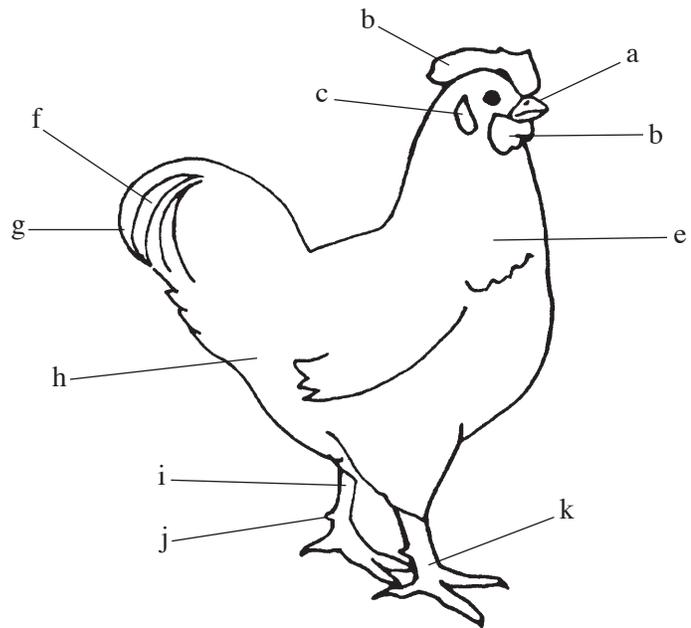
Turkey
 a. Snood
 b. Caruncle
 c. Beard (male)



Duck
 a. Bill
 b. Bean



Goose
 a. Bill
 b. Dewlap



Chicken
 a. Beak
 b. Comb
 c. Earlobe
 d. Wattle
 e. Hackle (male)/
 Neck (female)
 f. Main tail feathers
 g. Sickle feathers (male)
 h. Saddle feathers
 i. Hock
 j. Spur
 k. Shank



Poultry Breeds

Poultry Science, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- Ten breeds or varieties of poultry
- Differences between breed, variety, type, and strain
- Purposes of 10 poultry breeds (meat, eggs, exhibition)

ABOUT THEMSELVES:

- Cultural and ethnic differences in humans
- That cultural and ethnic diversity is a positive way to help people learn about each other

Materials Needed:

- Color pictures or diagrams of different breeds of poultry
- Cards with names of poultry breeds
- *American Standard of Perfection* book - (use to obtain breed descriptions)
- Activity Sheet 4 - “Poultry Breed Match”
- Leader Key - “Poultry Breed Match”

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

Leader Notes

If you look at chickens, ducks or any other birds, do they all look alike? Of course not. How are they different? You will notice that they are different sizes, shapes, colors, and have other physical features that make each one unique.

When we talk about poultry, we use several terms to describe what kind they are such as breed, variety, and strain. Do any of you have an idea of what these terms describe?

The term **breed** is used to describe a group of birds which are related by breeding. All birds of the same breed possess the same distinctive shape, general weight, and other physical traits such as comb type, skin, and feather colors.

Variety is a subdivision of a breed. A variety is identified by either feather color (black, white, red, brown), feather pattern, or comb type (single comb, rose comb, etc.). A breed may have many varieties.

The term **strain** is used to describe a specific group within a breed or variety which has distinctive characteristics. A strain is usually developed

Give members a chance to define each term in small groups.

Show pictures of several breeds and let members point out the differences.

Show pictures of several varieties of one breed from the “*Standard of Perfection*” and let them point out the differences they see.

Leader Notes

Show members *Standard of Perfection* book and flip through pages to give them an idea of what is included.

You can use the list of breeds and varieties provided or make up your own list. Use descriptions from the *American Standard of Perfection*. You might want to copy the descriptions on index cards. Hand out cards to members and see if they can match the name to the picture as you describe the breed or variety.

As you talk about each of the purposes, show a picture of those breeds that fall into these categories.

by a breeder who does not allow any outside bloodlines into his or her flock for a number of years. The strain is usually named after the breeder who developed it.

The book I'm showing you is called *The American Standard of Perfection*, which lists over 300 breeds and varieties of chickens, ducks, geese, and turkeys. This book is published by the American Poultry Association, Inc.

Now, let's take a look at the different breeds and see if you can match the name on the card with the picture as I describe them to you.

People who raise poultry usually choose a particular breed, variety or strain for a specific purpose, such as exhibition, meat production or egg production.

Exhibition birds are raised for competition in various shows. They may be either normal or miniature in size. The miniature chickens are called "bantams."

Egg production breeds and varieties are those that produce a large number of eggs. Most of the egg-laying hens are white. They are usually small, so they don't require as much feed as the larger breeds.

Meat production or broiler production breeds and varieties are usually larger and grow rapidly, but lay fewer eggs than egg production types.

DIALOGUE FOR CRITICAL THINKING

1. What are some characteristics that you look for in determining what breed or variety a bird is?
2. Name a breed of chicken that has white feathers.
3. Name a breed of chicken that has feathered shanks.
4. What are the main functions of different breeds or varieties? (exhibition, egg production, meat production, pleasure/recreation)
5. What are some names used to describe different cultures and ethnic backgrounds of people? (Ethnic is used to describe groups of people who have the same religious racial or national background.) (Caucasian (white), hispanic, black, asian, etc.)
6. What are some of the characteristics that are different between these groups of people?
7. Does a difference in ethnic background make any difference in how one relates to other people?

GOING FURTHER

1. Make a poster of different breeds and varieties of poultry.
2. Visit a hatchery or poultry farm to see what different breeds or varieties they raise.

POULTRY BREEDS
POULTRY SCIENCE, LEVEL I
Activity Sheet 4

Poultry Breed Match

Draw a line from the breed name to the correct picture.

Chickens

Rhode Island Red

Plymouth Rock

Sebright

Cornish

Leghorn

Polish

Houdan

Geese

Embden

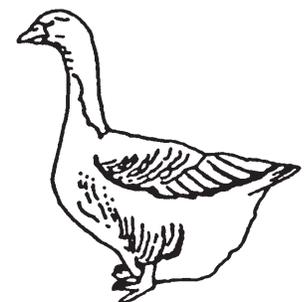
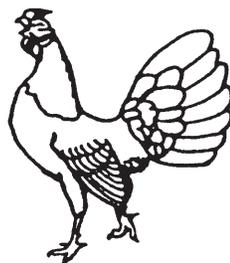
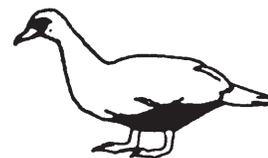
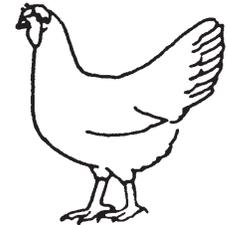
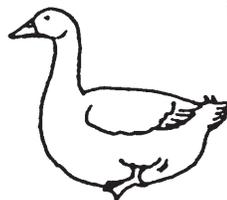
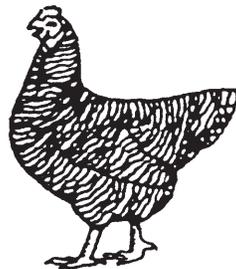
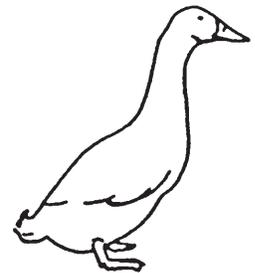
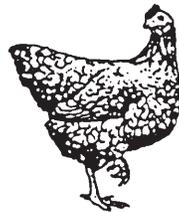
Toulouse

Ducks

Muscovy

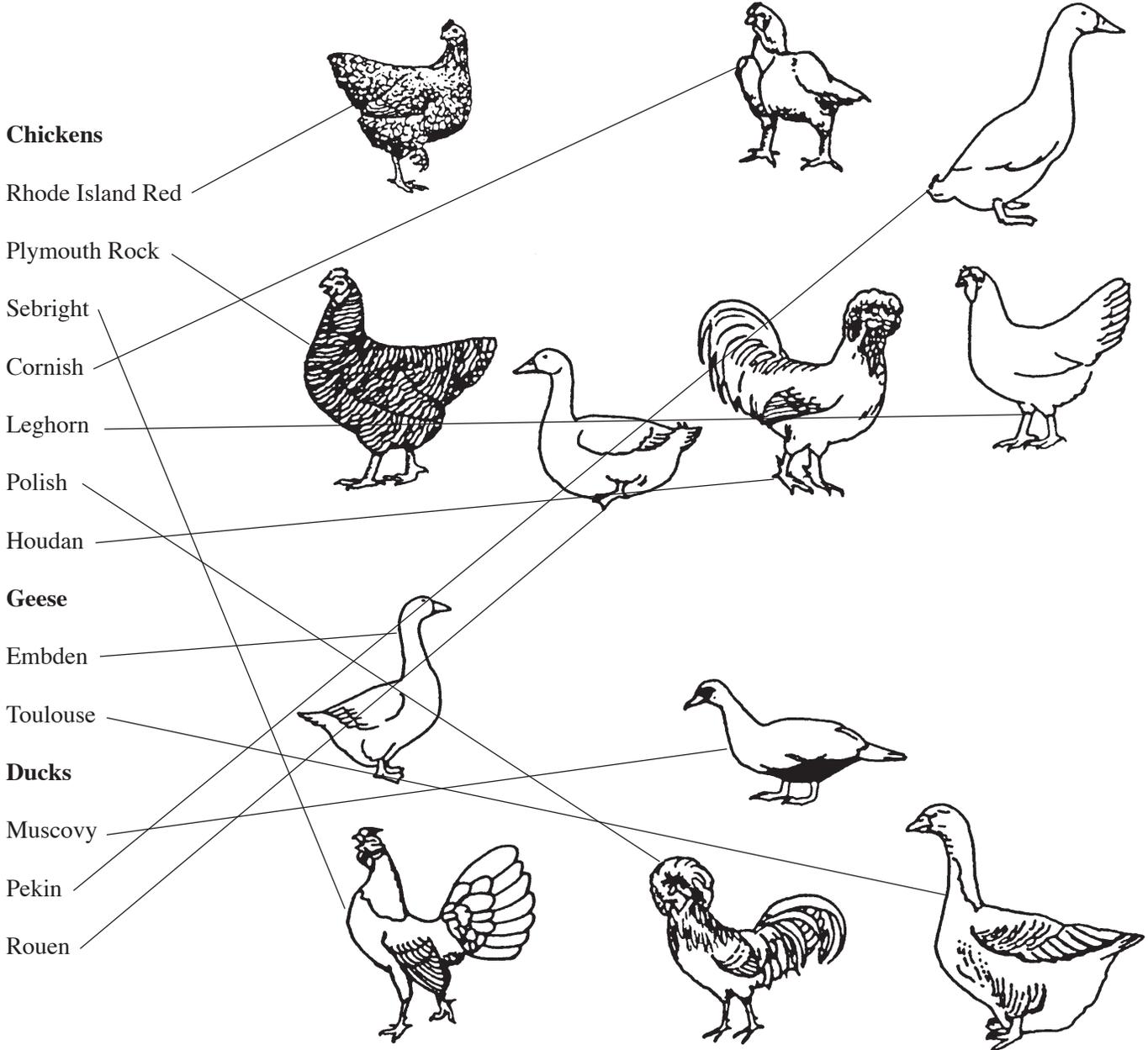
Pekin

Rouen



POULTRY BREEDS
POULTRY SCIENCE, LEVEL I
Leader's Key

Poultry Breed Match





Breeds of Poultry for Project and Show

Poultry Science, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- To identify the differences between standard breeds, strain crosses, and crossbreeds
- To identify the main function of five breeds, varieties, strains, or types

ABOUT THEMSELVES:

- Decisions about choosing the type of project they wish to have
- Skills that they do well

Materials Needed:

- *American Standard of Perfection* book
- Pictures or poultry magazines to show various breeds
- Poultry catalog
- Index cards with breed, variety, and purpose of breed or variety
- Member Handout 3 - "Breed Purposes"
- Member Activity Sheet 5 - "Breed Name Word Find"
- Leader Key - "Breed Name Word Find"

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

When you go shopping for some new clothes or shoes, what are some things you need to know before you start? Before you buy a new pair of shoes or clothing, you usually have an idea of why you are going to wear them. You wouldn't go out and buy a fancy dress, new suit, or dress shoes to wear for playing sports or doing chores. Some clothing and shoes are not appropriate for every occasion.

It's the same idea when you select your poultry project birds. You need to know the various breeds and varieties of poultry and for what purpose you want to raise birds. Do you want to raise birds for egg and/or meat production, or for exhibition or show?

Today, we'll learn about the differences between standard breeds, strain crosses, crossbreeds, and Bantam chickens, and the different breeds of ducks, geese, and turkeys, so you can make good decisions when you choose what poultry you will have for your project.

1. Let's talk about standard breeds first. Does anyone know what a standard breed is? **Standard breeds** or pure breeds of chickens are those

Leader Notes

Ask members what other project they plan for before they select or buy their materials needed. What did they do or think about?

Leader Notes

As you discuss each of the classifications of poultry breeds, show members pictures from the *American Standard of Perfection*, poultry magazines or other books.

breeds and varieties that have been recognized for specific characteristics for many generations and, when mated together, produce offspring with those same characteristics. They can be used for egg production, meat production, or exhibition projects.

Standard breed chickens may be exhibited as a single young or old bird of either sex. Exhibition-type stocks are available from all recognized breeds and varieties of poultry. These classes are usually designated as either large or small (bantam).

2. **Strain crosses** are also called inbreeds or hybrids. In chickens, they are usually White Leghorns. These birds have been selected for maximum egg production and small body size, and would be a good selection if you are going to raise chickens primarily for egg production. When you select a strain cross of Leghorns, they will usually be designated by the breeder's trade name such as DeKalb, Hyline, Babcock, etc. You should not use these birds for a meat production project because of their small body size.

3. Does anybody have an idea what a Crossbreed is? A **crossbreed** results from the crossing of two different breeds or varieties. Crossbreeds are raised for both egg and meat production. Some examples of Crossbreeds for an egg production project would be Austra-White, California White, Sex-Links and other similar crosses. If you are wanting to raise them for meat production, choose a crossbreed such as Cornish-Rock or Rock-Cornish.

4. If you want to raise and exhibit **bantams** (chickens of smaller size), you should select pure breeds rather than strain or crossbreeds. Bantams are available in most standard breeds of fowl. You can select from many other breeds such as Old English Game, Frizzle, Rosecomb, Sebright, Houdan, and Polish. When you exhibit bantams at a show, enter them as a single bird of either sex in either the standard bred bantam young or old classes. Most shows do not have a crossbred bantam class.

If you plan to raise your chickens for meat and egg production, you should look for **dual-purpose breeds** that have qualities favorable for both egg and meat production. Some breeds that fit in this category are the Rhode Island Red, New Hampshire, and Plymouth Rock. If you choose to exhibit these breeds at a fair, you would show a group of three pullets or hens.

If you are planning to raise chickens for meat production only, you would choose a meat-type breed, such as the White Plymouth Rock and White Cornish. In this class for exhibition, you would show a group of three pullets or cockerels. Can you identify some standard breeds in the pictures I have here?

Now that we have talked about the various breeds and varieties of chickens, let's move on to ducks and geese. Most shows do not have a cross-bred waterfowl class, so you should select a pure breed for your project. You would usually enter one bird of either sex.

Common breeds of **geese** are African, American Buff, Canada, Chinese, Egyptian, Embden, Pilgrim, Pomeranian, Sebastopol, and Toulouse.

Common breeds of **ducks** are Alyesbury, Buff, Call, Campbell, Cayuga, Crested, East India, Mallard, Muscovy, Pekin, Runner, Rouen, and Swedish.

If you decide to raise **turkeys**, select a variety for either a meat production project or for show. If you choose to raise turkeys for meat production, you can select a commercial strain cross of Broad Whites, such as Nickolas, Cuddy, and Hybrid. White-feathered varieties are easier to prepare for eating than dark-feathered varieties.

If you want to have a turkey project that is more for show purposes, you should select a variety that has a slower growth rate and poorer body conformation. The Beltsville Small White, Black, Bourbon Red, Bronze, Narragansett, Royal Palm, Slate, and White Holland are more suitable for show purposes.

At end of lesson, have members divide into teams and give them index cards with breed name. Play a matching game with pictures.

DIALOGUE FOR CRITICAL THINKING

1. What is the difference between a standard breed and a crossbreed?
2. What are the three purposes for raising poultry?
3. Name two breeds of chickens that are raised for meat production (White Plymouth Rock, White Cornish, Cornish-Rock, Rock-Cornish).
4. Name two breeds or crossbreeds of chickens that you should select for egg production (Rhode Island Red, New Hampshire, Plymouth Rock, White Leghorn, Austra-White, California White).
5. Why should you not select a strain of egg-type chickens for a meat production project? (because of their small body size).
6. Why would you select a white-feathered variety instead of a dark-feathered variety when selecting turkeys to raise for meat production? (white-feathered varieties dress more easily).
7. What breed or variety of poultry do you like? Why?
8. Do you have classmates at school from different countries or different races or colors? What do you remember most about them?
9. Do you think people were put on earth for different purposes? Name people you know who are good readers, spellers, singers, or good at different sports, etc.

GOING FURTHER

1. Make a poster about the different breeds and varieties of poultry and share with members at next meeting or classmates at school.
2. Visit a poultry hatchery.
3. Attend a poultry exhibition and identify what breeds and varieties are most popular.
4. Read a book about poultry and share with members at next meeting or at school.

BREEDS OF POULTRY FOR PROJECTS AND SHOWS
POULTRY SCIENCE, LEVEL I
Member Handout 3

Breed Purposes

Species	Purpose	Breed, variety, crossbreed, or strain cross most suitable
Chickens	Egg Production	Leghorn (white eggs) Plymouth Rock (brown eggs) Rhode Island Red (brown eggs) New Hampshire (brown eggs) Sex Links (brown eggs)
	Meat Production	Cornish-Rock Rock-Cornish
	Dual-Purpose	Plymouth Rock Rhode Island Red New Hampshire Red
	Exhibition	Bantams: Houdan Polish Sebright
Ducks	Meat Production	Pekin Rouen Muscovy
	Egg Production	Khaki Campbell Indian Runner
Geese	Egg & Meat, Exhibition	Embden Toulouse Buff
Turkeys	Meat Production	Broad White
	Exhibition	Broad Breasted Bronze Bourbon Red Narragansett

BREEDS OF POULTRY
POULTRY SCIENCE, LEVEL I
Activity Sheet 5

Breed Name Word Find

Find and circle the breed names in the letter diagram below.

Cornish
Bantam
Houdan
Wyandotte
Pekin

Rhode Island Red
Muscovy
Khaki Campbell
Toulouse
Broad White

Rouen
Leghorn
New Hampshire
Emden

K A X Y M U S C O V Y R R
H O U D A N P N L A B O H
A M I Z B U F E L G T U O
K G A N A E E W X R O E D
I C O R N I S H I I U N E
C Y G S T S H A O P L Q I
A W W X A C B M N M O L S
M R T G M E E P A R U E L
P E K I N Y J S W F S G A
B B R O A D W H I T E H N
E F Q C V U A I U K L O D
L E M B D E N R A Y B R R
L I J L O N R E W S A N E
W Y A N D O T T E U A Q D

BREEDS OF POULTRY
POULTRY SCIENCE, LEVEL I
Leader's Key for Activity Sheet

Breed Name Word Find

Find and circle the breed names in the letter diagram below.

Cornish
 Bantam
 Houdan
 Wyandotte
 Pekin

Rhode Island Red
 Muscovy
 Khaki Campbell
 Toulouse
 Broad White

Rouen
 Leghorn
 New Hampshire
 Embden

K	A	X	Y	M	U	S	C	O	V	Y	R	R
H	O	U	D	A	N	P	N	L	A	B	O	H
A	M	I	Z	B	U	F	E	L	G	T	U	O
K	G	A	N	A	E	E	W	X	R	O	E	D
I	C	O	R	N	I	S	H	I	I	U	N	E
C	Y	G	S	T	S	H	A	O	P	L	Q	I
A	W	W	X	A	C	B	M	N	M	O	L	S
M	R	T	G	M	E	E	P	A	R	U	E	L
P	E	K	I	N	Y	J	S	W	F	S	G	A
B	B	R	O	A	D	W	H	I	T	E	H	N
E	F	Q	C	V	U	A	I	U	K	L	O	D
L	E	M	B	D	E	N	R	A	Y	B	R	R
L	I	J	L	O	N	R	E	W	S	A	N	E
W	Y	A	N	D	O	T	T	E	U	A	Q	D



What Bird Will I Raise?

Poultry Science, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- Poultry species or breeds available in your area
- Types of birds that can be raised or exhibited in your area or county
- Factors to use in selecting a species or breed

ABOUT THEMSELVES:

- Their feelings about making choices
- Their feelings about their cultural or ethnic background

Materials Needed:

- Chalkboard or flip chart
- Chalk or markers

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Today we are going to review some of the previous lessons, so you can decide what species or breed of poultry would best fit your family situation. Depending on where you live, you may be able to raise a lot of chicks or only keep a few for fun or show. You will also need to determine if you plan to raise birds for meat, eggs, or exhibition.

Look at the pictures of the various breeds in your leader's *Standard of Perfection for Poultry* as you talk and discuss the major differences between breeds.

POULTRY TYPES

Market poultry is a production and marketing portion of the project that is well suited for younger (Level I) members using broilers, roasters, capons, or turkeys. The objective with these birds is to properly grow and process meat-type poultry for home consumption or sale.

Considerations:

1. Start with any number of chicks or poults of either sex for broilers, roasters, and turkeys, or cockerels for capons.
2. Care for the flock using accepted management and feeding practices.
3. Keep records of income and expenses.
4. Process the birds for eating at home or to sell.

Leader Notes

Use this lesson only for members who have the opportunity to actually raise birds. The ultimate objective of the poultry project is not to make poultry producers out of each child, but rather to use poultry as a vehicle to enhance each child's development. It is also important to prepare youth to be more knowledgeable consumers of poultry products by understanding poultry production. Help members: (1) select the species, breed, or type that will be best for their conditions and interests, and (2) plan their project lessons in a manner that will allow them to enjoy the activities, increase their knowledge, and realize a sense of achievement.

Divide the members into small groups. Have them list or name various species or breeds for you to list on a chalkboard or flip chart. As a group discuss the differences, advantages and disadvantages of

Leader Notes

the species or breeds listed. Help members write down their plans for raising particular breeds or species.

Egg production and marketing is best suited for Level II members or older using egg-type chickens. The objectives for these birds is to manage them for the production of high quality eggs for eating at home or to sell.

Considerations:

1. Start by growing pullet chicks to maturity or by purchasing (ready-to-lay) pullets.
2. Care for the flock using accepted management and feeding practices.
3. Keep production and expense records.
4. Process and package eggs for home consumption or sale.
5. Requires housing for entire year.

Exhibition birds are best suited for Level III and IV members who prefer to care for birds in preparation for competitive showing only.

Considerations:

1. Start with any number of exhibition-type, standard-bred (purebred) chickens, turkeys, ducks, or geese of either sex.
2. Care for birds using accepted management and feeding practices.
3. Keep appropriate records.
4. Select birds and properly prepare them for show.

Pigeons may be raised for meat, racing, or exhibition. They adapt themselves to living under a variety of conditions. These birds are easy to raise, fairly inexpensive to keep, and require very little space. This is one species that is seldom restricted by zoning regulations.

Considerations:

1. Own and care for a minimum of one pair of birds.
2. Maintain appropriate records.
3. Plan to learn how to exhibit or race the birds.

After you have selected two or three breeds that you like, ask your project leader to review your choices with you and your parents before making your final decision.

DIALOGUE FOR CRITICAL THINKING

1. How many species of poultry did you list?
2. How many breeds did you talk about?
3. How difficult was it to pick only two or three breeds?
4. What makes you and your situation better suited for raising a certain kind of poultry (egg producing, meat producing, or show)?
5. How did you feel about all the information you had to think about before choosing a particular breed or species?
6. Classes of chickens come from different parts of the world. Chickens vary according to many characteristics. How do people vary?

GOING FURTHER

1. Discuss breeds according to whether they are for egg or meat production.
2. Learn more about meat market birds like ducks, geese, turkeys, or game birds.



Nutritional Needs and Problems in Poultry

Poultry Science, Level I

What Members Will Learn...

ABOUT THE PROJECT:

- The six basic nutrients and the ingredients that supply them
- The symptoms of selected nutritional deficiencies in poultry
- The causes of nutritional deficiencies

ABOUT THEMSELVES:

- Their basic nutrient needs
- The importance of eating a well-balanced diet
- How nutrient needs change as they grow, mature, and become older

Materials Needed:

- Six 4" x 10" poster cards (nutrient cards—labeled as Water, Carbohydrates, Fats, Proteins, Minerals, Vitamins)
- One felt marker
- Nutrient Puzzle-Activity Sheet 6
- Nutrient Puzzle-Leader's Key
- Pencils

ACTIVITY TIME NEEDED: 45 MINUTES

ACTIVITY

Leader Notes

The proper kinds of food are important to an animal's survival and health. The 4-H poultry project member must know which nutrients are needed for the poultry's health, egg production, growth, or fattening.

What is a nutrient? A nutrient is a chemical needed for life. Food contains nutrients. There are six (6) basic nutrients for poultry. Some are needed in large amounts, while others are needed only in small amounts. Each nutrient has a different purpose for the body.

These nutrients must be included in a poultry ration to have a balanced ration.

1. **Proteins** are the building blocks of the body. They are needed to maintain health, for growth, reproduction, work, and egg production.

Proteins are made of chemicals called amino acids. Amino acids contain nitrogen, carbon, hydrogen, oxygen, and sometimes sulfur. When food is digested, protein is broken down into different amino acids which are carried to parts of the body in the blood. The chick requires rations which will supply 10 important amino acids.

Have members list what they feel are the six basic nutrients for poultry. Check those listed against the definition.

Ask members to name a nutrient. Ask members to list or mention a basic function of each nutrient and discuss it before giving correct information.

Leader Notes

Protein may come from either plant or animal sources.

2. **Carbohydrates** are the bird's major source of energy. Energy is necessary to maintain body temperature and for activity. When carbohydrates are not used by the body, they are stored in the body as fat.

The carbohydrates that are digestible by poultry are sugars and starches. The main source of these carbohydrates is grains.

3. **Fat** is also an energy source, but is only needed in small amounts because it is a very concentrated form of energy. Fat can be stored in the body for later use.
4. **Minerals** are needed in small amounts. They are needed for the growth and health of bones and for many life processes. The important minerals in poultry rations are calcium, phosphorus, magnesium, manganese, zinc, iron, copper, iodine, sodium, chlorine, potassium, sulfur, molybdenum, and selenium.

5. **Vitamins** help such body functions as vision, blood clotting, and bone development.

Some vitamins dissolve in the presence of fat. Some vitamins dissolve in the presence of water.

6. **Water** is the nutrient required in the greatest amount. Water cleans the body and regulates the body temperature. It carries other nutrients through the body and carries wastes out of the body. Of the six nutrients, water makes up the greatest proportion of a bird and the egg.

Usually, a chicken will drink about twice as much water by weight as food they eat. Age, body weight, production, weather, and type of ration will affect how much water birds will drink. Water is found in the feed as moisture, but an additional supply of fresh water must be provided.

Pass out Nutrient Puzzle.

Check your knowledge about the poultry animal nutrients with the crossword puzzle.

Not enough feed, water, or a deficiency of a nutrient can lead to problems. Here are some common ones and how to prevent them.

Too little feed may cause growing birds to lose weight and egg layers to stop laying. Death could result if birds do not have feed for several days.

With **too little protein**, birds will grow more slowly, start pecking each other, pull and eat their feathers, and may develop leg problems. Layers produce fewer and smaller eggs. Some hens may stop laying completely.

Not enough water causes birds to stop eating, lose weight and dehydrate. Layers will stop laying and lose their feathers. Without water, birds will dehydrate and die sooner than when feed is lacking.

Mineral Deficiency — a deficiency of calcium will result in thin eggshells, soft bones (rickets), and abnormal walking.

Vitamin Deficiency — a deficiency of Vitamin A in chicks may cause depressed growth, weakness, and loss of coordination. If birds do not receive enough Vitamin D, they will develop leg problems, poor growth, and poor feathering.

DIALOGUE FOR CRITICAL THINKING

1. List the six essential nutrients in a poultry ration.
2. Which nutrient is needed most? (Water)
3. Which nutrients are the most difficult to provide to birds? Humans?
4. What nutrient do you have the most trouble including in your diet?
5. Why do you think nutrient amounts in your diet compared with your parent's or grandparent's diet would be different?

GOING FURTHER

1. Learn protein requirements for varying ages and types of poultry.
2. Visit a feed store and compare nutrients available in different feeds.
3. Conduct a research project with poultry by feeding one group more nutrients than the other.
4. Give a presentation on various nutrient deficiency effects in poultry.

NUTRITIONAL NEEDS AND PROBLEMS IN POULTRY
POULTRY SCIENCE, LEVEL I
Activity Sheet 6

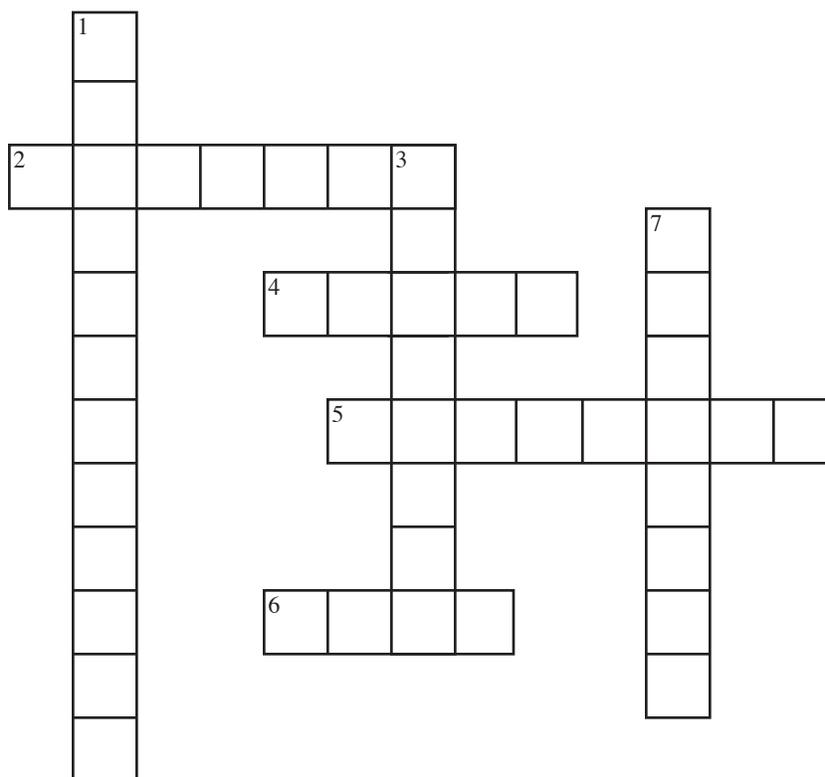
Nutrient Puzzle

Across:

2. Nutrient required for muscle growth
4. Nutrient required in the greatest amount
5. Examples are calcium, phosphorus, and iron
6. An energy source only needed in small amounts

Down:

1. The major energy source nutrient
3. A compound that aids in the support of life
7. Only minute amounts are required



NUTRITIONAL NEEDS AND PROBLEMS IN POULTRY
POULTRY SCIENCE, LEVEL I
Leader's Key for Activity Sheet

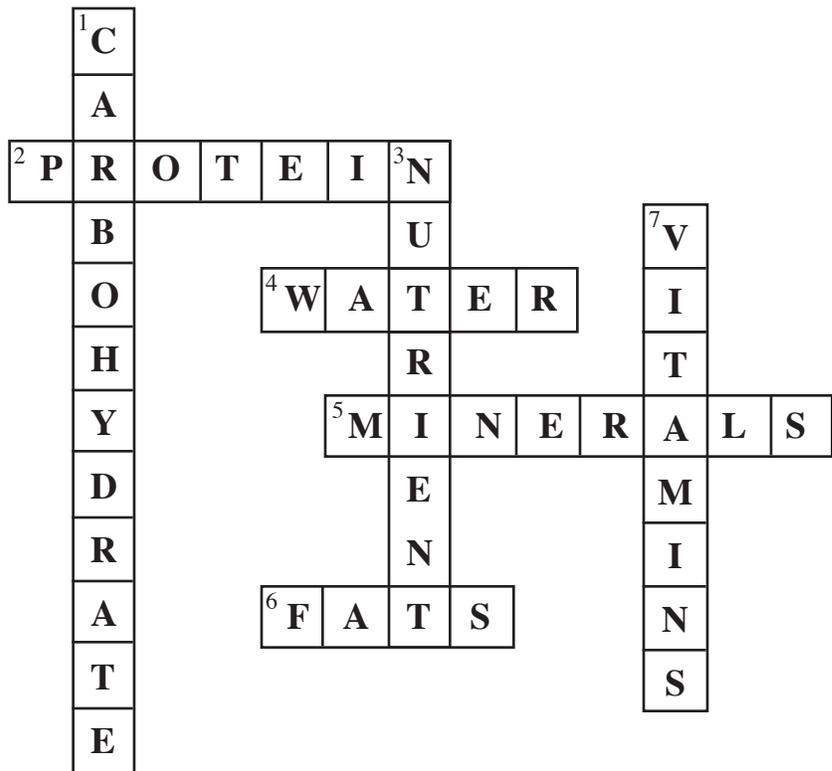
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Down:

- 1. The major energy source nutrient
- 3. A compound that aids in the support of life
- 7. Only minute amounts are required





Is Your Bird Sick?

Poultry Science, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- What a healthy bird looks like
- Five signs of illness

ABOUT THEMSELVES:

- Symptoms of a healthy person
- Symptoms of a sick person
- Their feelings about people who are sick

Materials Needed:

- Chalkboard or flip chart
- Activity Sheet 7 - "Flock Observation Sheet"
- Markers or chalk
- Pencil

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Leader Notes

Recognizing signs of illness in a bird sounds easy; however, it can be difficult. Birds tend to mask their symptoms until they are very ill. This may help them survive in the wild, as sick birds may attract predators and are usually driven out by other members of the flocks. By the time the bird actually behaves sick, it may be near death, making treatment difficult. Because diseases can spread very quickly, it is important to recognize problems in a flock early, before they get out of hand.

A **healthy bird** has shiny, tight feathers, and strong beak and claws. The eyes and nostrils are free of discharge. The feathers around the vent are clean. The breast muscles are full, and the keel bone can barely be felt. A healthy bird spends much of its day foraging for food, and likes to stay close to the flock. Normal bird droppings are green and firm, with a white cap.

Signs of illness include weight loss, lower egg production, and lower feed intake. Other signs often include coughing, diarrhea, and fever. A sick bird may isolate itself from the rest of the flock and stand with its feathers ruffled and its neck hunched up.

If you suspect your birds have an illness, contact your local veterinarian.

In small groups have members list how a healthy bird acts or looks. Have each group report and list on chalkboard or flip chart. Do same activity for signs of illness.

Leader Notes

Flock Observation

Visit a flock of poultry in your area. Observe the flock for several minutes. Write down all the behaviors you can identify. Are there any birds in the group that are acting differently than the rest?

Look at the bird droppings. Are any of them different than described above?

Close your eyes and listen quietly to the flock. How would you describe “normal” flock sounds?

Hand out “Flock Observation Sheets” to each member. After they have observed the flock and listed behaviors and symptoms, discuss their answers.

Choose one bird from the flock and pick it up if possible. Carefully examine its feathers, eyes, nostrils, vent, and breast muscles. Does it appear healthy or not?

DIALOGUE FOR CRITICAL THINKING

1. What was the most unusual or interesting thing you saw while watching the birds?
2. How did you feel when you listened to the flock with your eyes closed?
3. What signs of illness did you see?
4. How does your brother, sister, or friend look or act when they don't feel well?
5. What do you do when you don't feel well? How do you act?

GOING FURTHER

1. Ask a veterinarian to visit with you about bird health.
2. Ask a medical doctor to speak to your group about observing signs of illness.
3. Share with your classmates at school what you learned.

IS YOUR BIRD SICK?
POULTRY SCIENCE, LEVEL I
Activity Sheet 7

Flock Observation Sheet

What You Observed (Saw)	Check One	
	Normal	Sick
1. _____		
2. _____		
3. _____		
4. _____		
5. _____		
6. _____		
7. _____		
8. _____		
9. _____		
10. _____		
11. _____		
12. _____		
13. _____		
14. _____		



Catching and Handling Poultry

Poultry Science, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- To catch a bird in a cage or coop, remove it, and then return it
- To hold a bird to examine for judging or culling

ABOUT THEMSELVES:

- How they feel about their ability to catch and handle birds in different situations
- Their feelings about being restrained by someone

Materials needed:

- Table and cage
- Live bird
- Wood shavings or shredded paper
- Paper or plastic to cover table

ACTIVITY TIME NEEDED: 30 MINUTES

ACTIVITY

It is necessary to catch and handle birds when selecting, judging, and at various times in the management of the flock. Proper catching and handling methods can prevent injury and discomfort to the birds and the persons doing the handling. 4-H members can show skills they have learned in working with poultry.

Removal of bird from a cage

Open the cage door. Reach across the bird's back; grasp the far wing; turn the bird so it faces the cage door. Slide second hand beneath the bird's body, placing one or more fingers between bird's legs and grasping them so that the bird, when lifted, can be balanced on the palm of that hand. Place first hand on bird's back. Remove bird from cage head first. Come to attention and watch judge for further direction.

Placing bird in cage

Hold the bird in the basic hand position, open the cage door, turn the bird, put into cage head first, place it gently on the cage floor, and close the cage door.

Passing bird to another person

The person receiving the bird should place one hand on the back of the bird and slide the other hand under the breast of the bird as the bird is passed. Always pass the bird head first.

Leader Notes

This would be an easy activity to simply demonstrate to the members and have them practice the various steps. Another method which provides greater opportunities to develop life skills as well as catching and handling skills is outlined below. You'll find that members will have additional enthusiasm and interest as you give them the opportunity to learn by doing before being told or shown how. This is sometimes referred to as a skillathon. Consider the following two skillathon situations:

SITUATION #1: The poultry showmanship judge has asked you to remove your bird from the cage. **YOUR TASK:** Demonstrate how you would remove the bird while the judge looks on.

SITUATION #2: The judge asks you to pass your bird to the person next to you. **YOUR TASK:** Demonstrate how you would safely pass the bird.

Leader Notes

Showmanship lesson—Level II has pictures that can be used to supplement these first three handling methods.

Catching a small group of birds

Drive birds into a corner or small area. You may use portable wire panels that have been hinged together in a series of three or more so they can be folded or expanded and still remain standing. Each panel should be about 2 feet wide by 3 or 4 feet high. Stretch the folding panels across the corner of the larger pen so there is just enough room for the birds to stand. Make sure the panels will not collapse from the weight of the birds pushing against the sides. After the birds have been driven into the smaller pen, work as fast as you can to catch the birds by grabbing them from behind by the legs and handing them over the fence to someone to put into a crate. Be careful to not let the birds pile up for more than a minute to prevent smothering.

Catching single birds from a flock

Make a catching hook from stiff wire. The hook should be about four feet long with a handle on one end and the other end bent back on itself to form an S-shaped hook. The open end of the hook should be wide enough to allow the shank of the bird to slip through and the bottom flared just enough to allow the foot to be held. Pull the open end of the hook over the shank of the chicken's leg, drawing back on the hook when the shank is caught. Pull the bird toward you, grab both legs in one hand and take the foot from the hook.

DIALOGUE FOR CRITICAL THINKING

1. Name three methods of catching a bird.
2. What was the hardest part to learn or do?
3. What happened when you first attempted to remove a bird from a cage?
4. How did you feel after you successfully caught a bird?
5. How do you feel when someone catches and holds you by the hand or foot?
6. How can learning how to treat birds help you know how to treat your friends?



Washing that Bird

Poultry Science, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- The importance of exhibiting clean and parasite free birds
- Show how to properly clean and groom a bird for show

ABOUT THEMSELVES:

- Their feelings about the importance of personal grooming
- Their feelings about the importance of teamwork

Materials Needed:

- Three tubs or large containers of warm water
- Detergent or mild soap
- A sponge or soft brush
- Old towels or soft cloths
- Petroleum jelly, mineral oil, or a similar type of oil
- Clean coops or cages
- Several birds

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

Leader Notes

Poultry for exhibit should be clean and free of external parasites, tiny bugs like lice and mites that sometimes live on the outside of a chicken's body. Dirty birds reflect poorly on the exhibitor and will be graded down during judging. Birds must be washed to have a clean appearance. Birds of other colors and waterfowl may only need their shanks and feet washed and some cleaning about the head with a damp cloth.

Not all poultry exhibitors use the same procedure to prepare their birds for show. More experienced members in the club may be familiar with a washing procedure. We suggest the following:

1. Use a warm (about 80—85°F), draft-free room for washing and drying the birds. Birds should dry slowly for best results. Use a heat lamp if a warm area is not available.
2. Use three tubs of water; work up a good batch of suds in the first tub and use the second and third tubs for rinse water. The wash water should be warm to the touch and the rinse water slightly cooler to help remove the soap.

Obtain the necessary supplies prior to the meeting.

Divide the group into teams of two or three members each. Provide each team with a bird and access to the supplies.

Leader Notes

Demonstrate step by step how to wash and groom a bird. An older, experienced member or a local exhibitor could demonstrate.

3. When washing the bird, rest it on the palm of one hand and restrain it with the other hand held over the back of the bird.
4. Soak the feathers well or they may break.
5. Wash the feathers thoroughly, with the grain, using your hand or a sponge.
6. Rinse with lukewarm water by moving the bird back and forth through the water. After removing the bird from the water, press as much water as possible from the feathers. Repeat the procedure after each rinse. Be sure there is no soap left on the feathers.
7. Press (don't rub) dry the birds with a towel or cloth and place them in a clean coop or cage in a warm room until they are completely dry.
8. Check the birds for lice and mites and treat if infested.
9. Just prior to judging, check the birds for soiled spots that can be removed with a damp cloth. Clean the shanks and toes with a brush. Use a toothpick to clean around the toes and under the shanks. Rub a small amount of mineral oil or petroleum jelly on the shanks, feet, beak, comb, and wattles. This will give these areas a polished appearance.

Nothing gives a judge a more negative attitude about an entry than the presence of external parasites. Thus, the birds should be examined for the presence of external parasites several days prior to the show. The most common external parasite found on show birds is the common body louse. This parasite is visible to the naked eye. Body color varies from gray to yellow to black. They live on the bird, feed on dry scales and feathers, and get moisture from the vent. The most obvious signs of an infestation are the movement of the lice in the vent area of the bird, and the presence of clusters of eggs (nits) on the feathers around the vent. If lice are present, dust each bird individually, particularly around the vent, with a recommended insecticide. For a small flock, providing a dust box with insecticide is a good control practice.

▲Warning. Use pesticides with care. Apply them only to plants, animals, or sites listed on the label. When mixing and apply pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. If pesticides are spilled on skin or clothing, remove clothing and wash skin thoroughly. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

DIALOGUE FOR CRITICAL THINKING

1. What happened when you soaked the bird in warm water?
2. How did you feel about getting the bird wet?
3. What was the most difficult part of washing the bird? Easiest?
4. How did washing the bird compare to washing other animals?
5. What did you learn about teamwork?
6. How often do you take a bath or shower? Why?
7. Compare washing a bird to helping wash a baby brother or sister.
Consider water temperature and how gently you handled or held each bird.

GOING FURTHER

- Demonstrate how to prepare a bird for show.



Why Do We Raise Poultry?

Poultry Science, Level I

What Members Will Learn . . .

ABOUT THE PROJECT:

- Five eggs or egg products
- Price differences in size and grade of eggs
- Three companies that distribute poultry meat products

ABOUT THEMSELVES:

- How they can learn at the grocery store
- Their ability to check prices and compare items

Materials Needed:

- Activity Sheet 8 - “Store Search”
- Clipboard or something to write on
- Pencil

ACTIVITY TIME NEEDED: 60 MINUTES

ACTIVITY

We raise poultry mainly for food. Poultry products can be seen in stores as eggs and poultry products or as meat and meat products.

Today we are going to the local grocery store to see how many types of eggs and egg products we can find. Be sure to check the price differences between different sizes and grades of eggs. See how many company or brand names you can find.

DIALOGUE FOR CRITICAL THINKING

1. How many different items did you find?
2. Were there more egg or meat products?
3. What types of items were hardest to find?
4. How did you feel when you couldn't find what you were looking for?
5. What differences did you see in prices?
6. What did you learn about egg prices that might help you buy other items?

GOING FURTHER

1. Visit someone who sells eggs to see how they size or grade their eggs.
2. Visit or ask a poultry products company to send you information about their products.

Leader Notes

Divide members into groups of two or three and let them find and list products on the “Store Search” Activity Sheet.

Be sure to spend some time reviewing and discussing “Store Search” Activity Sheet.

Adapted from a Kansas State University Cooperative Extension Service publication written by Cynthia R Siemens and reviewed by James P. Adams and Albert W. Adams, All from KSU.

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4-H 

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EXTENSION

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