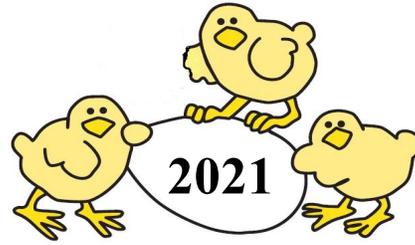


POULTRY

Allen County 4-H

Due June 30 in the Extension Office

Level 1 – Grades 3-4-5



\$1.00

What you will do in this project:

- Enroll in the 4-H program by January 15.
- Complete the project by answering at least two of the activities in this activity sheet and turning it into the Extension Office **by the last business day of June, June 30**, or earlier. This activity sheet consists of activities, and a record sheet.
- Attend County 4-H Poultry workshops when offered.
- Refer to the Allen County 4-H Rules Book for a complete listing of all regulations concerning this project.
- You can exhibit in all 10 Classes that are offered, no more than 2 pens per class.
- You may exhibit a Poultry Education poster in addition to the birds.
- All birds must be in your possession by May 15 with the exception of broilers that are hatched at the end of May.
- Complete FairEntry online by published deadline.
- To exhibit beef cattle, dairy cattle, swine, sheep, meat goats, dairy goats, poultry and rabbits, 4-H members must be certified through the Youth for the Quality Care of Animals program. This is an annual program that can be completed via online modules or in-person trainings. For more information about in-person trainings in your county, please contact your County Extension Office. More information about YQCA is available at <http://yqca.org/>. **Attach a copy of YQCA card.**

Management Tips:

- Provide clean, freshwater to your birds at all times. In the winter, warm (but not hot) water will be needed. Birds on average will drink 1-2 cups a day. Check their water at least twice a day – more often on hot days.
- One chicken eats about 2 pounds of feed each week. 12 chickens eating two pounds a week would eat 24 pounds week. (12 birds x 2 lbs = 24 lbs)
- A feed ration of at least 16% protein for the mature chicken is needed.
- Put at least a 4 inch layer of bedding on the floor for your birds and keep dry. Spread fresh bedding on the top. Clean area completely at least once a year with a solution of 2 tablespoons of chlorine bleach into 2 gallons of boiling water. Scrub with a broom. Ventilate well to dry.
- Birds should be washed before bringing to the fair with a solution of warm water and 2 table spoons of chlorine bleach in a five gallon bucket.

4-H Member: _____ 4-H Club: _____

Grade in School (January 1, 2021) _____ Years in this project _____

Signature of 4-H Member verifying that you have completed these activities:

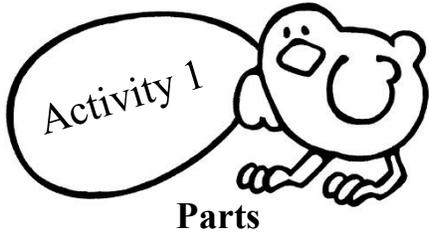
Signature of Parent that you have reviewed this information:

4-H Animal Care:

The Indiana 4-H program strongly supports positive animal care and strongly opposes animal abuse. 4-H is also dedicated to the mission of developing youth and volunteers through “Learning by Doing” programs.

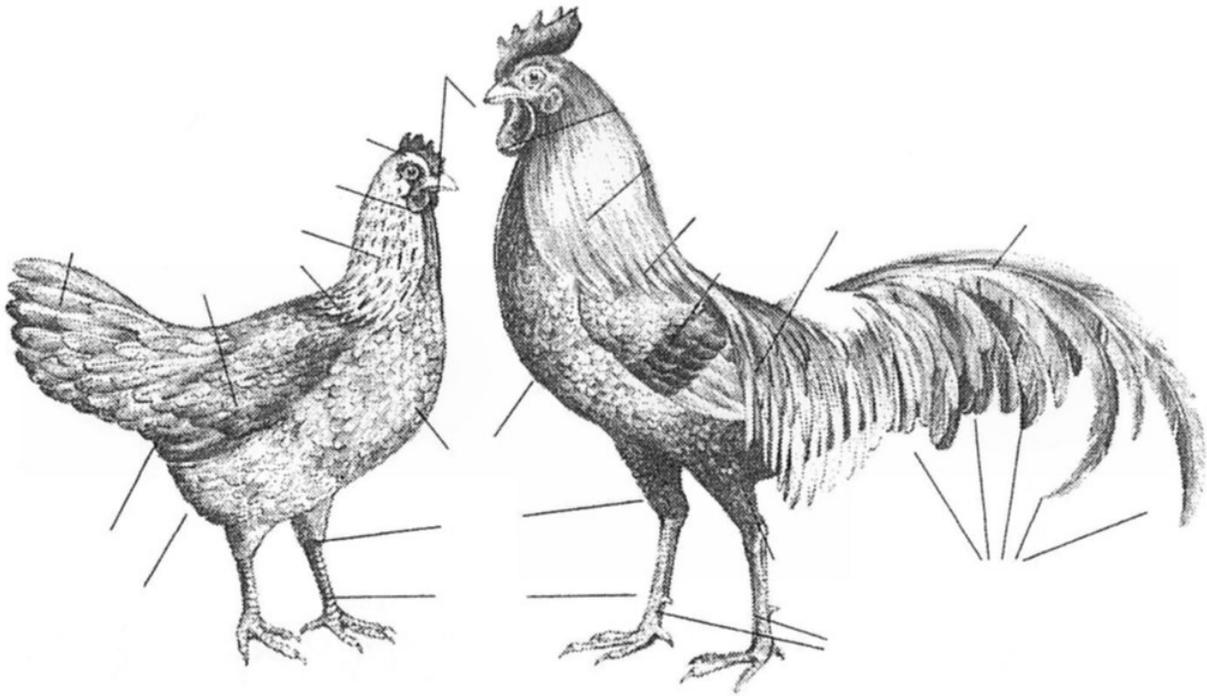
4-H livestock projects teach life skills such as acquiring knowledge, making decisions, and applying leadership skills.

- When working and caring for animals, it is important to insure that appropriate safety measures are in place for both the animals and the persons who care for them. Therefore, there is no substitute for knowledge, common sense, and experience.
- Animal handlers should study and learn to anticipate an animal’s reaction and try and avoid problem situations. It is most important that 4-H members understand an animal’s behavior so one can “outsmart” not “out-muscle” an animal. Foremost in the 4-H’er mind should always be safety of the handler and the animal. Moving animals is more of an art than a science. Movement of animals requires planning and knowledge to accomplish it with the least amount of time, effort and stress to the animal.
- An animal’s good health is often directly related to the environmental factors associated with its living space. The presence of predators, dust, odors, pests, temperature, and humidity has a direct effect on an animal’s well-being.
- Animals react favorably to daily care and comfortable housing. Consideration should also be given to specific animal needs such as size of their housing space, lighting, and ventilation. The best facilities and equipment cannot and should not be a substitute for daily observation and careful attention to signs of illness, injury, and/or unusual behavior.
- Frequent consultation with your veterinarian is a must. Reasonable attention must always be given to the use of drugs and their approved withdrawal times.



Identify the parts of the birds using the word bank below. Some words may be used on both birds.

Tail	Cape	Wattle	Beak
Breast	Wing	Hackle	Comb
Cushion	Hock	Stern	Shank
Saddle	Sickles	Spur	



Parts of a hen and cock shown on *Gallus gallus*, the "original" chicken

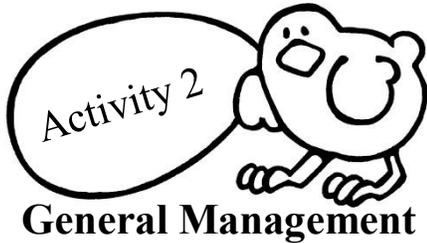
Correctly identify the type of comb the chicken has. Use the word bank below to help.

Single Comb
Cushion Comb

Buttercup Comb
Strawberry Comb

Pea Comb
Rose Comb





Raising poultry successfully for meat, eggs or exhibition depends on your ability to provide the proper management and care for the birds.

Housing and Equipment

The basic requirements of a poultry house are that it provide enough space, protection from weather and predators (dogs, possums, foxes, etc.) and allow for movement of air. Space requirements depend on the type of chicken such as for egg production, exhibition or meat production.

Egg-production birds require about 3 square feet of floor space per bird. Larger breeds grown for exhibition need more space. Space also should be provided for separating males and females for exhibition. Bantams need 2 to 3 square feet of floor space per bird. For both standards and bantams, individual cages are required for the adult males.

Poultry house windows should be covered with 1-inch mesh poultry netting. During cold weather, the windows can be covered with plastic film if needed. Be sure to provide adequate ventilation.

All young chicks require a heat source. Heat can best be supplied by an electric heat lamp. A 125-watt lamp is suitable for cool and warm weather and a 250-watt lamp for cold weather.

Chicks will need a trough or tube feeder. A trough 2 feet long is adequate for 12-15 chickens. One tube feeder will provide enough feeder space for 25 chickens. A 1-gallon waterer is adequate for 25 to 30 chicks. Use larger waters for older chickens.

Brooding Management

Brooding refers to the care of young chicks during the first 2 to 3 weeks of life. Good brooding practices bring out good qualities in chicks.

Use a disinfectant to sanitize the house and equipment before the chicks arrive. A solution of chlorine, iodine or quaternary ammonia can be used. When using any disinfectant, carefully follow the instructions on the label and get an adult to help you. Cleaning and disinfecting help to control diseases and parasites.

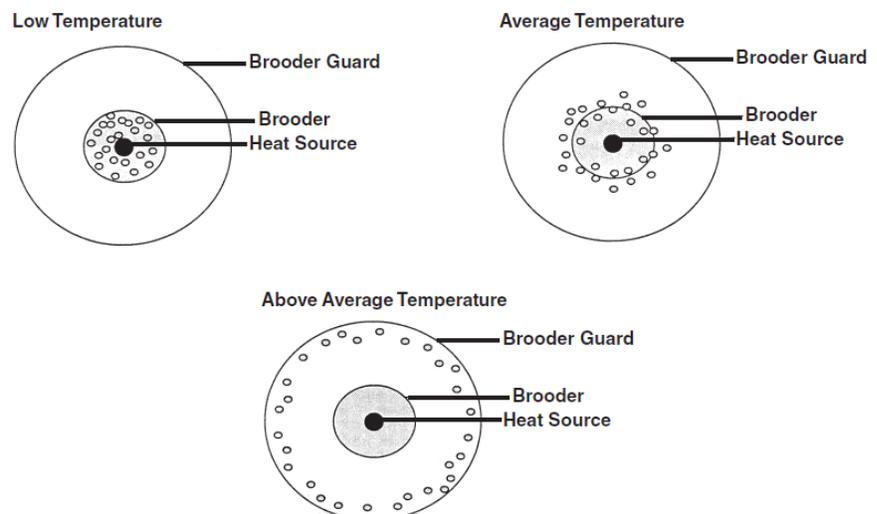
Once the brooding area has dried, place 4-6 inches of dry litter on the floor. Materials such as dry pine shavings, rice hulls or chopped straw make good litter.

The brooder lamp should be suspended about 15-18 inches above the litter and turned on the day before the chicks arrive. The lamp should be an infrared lamp, generally a 250-watt lamp bulb. Do not hang it by the electrical cord. Secure the lamp at the proper height with a rope or chain. Heat lamps get very hot and are a fire hazard. They should not come near or touch the litter.

Place waterers and feeders inside the brooder area near the heat source. Do not crowd them under the light.

Place feed in shallow, flat pans for the first two or three days. This makes it easy for chicks to find food.

After day three, replace the feed pan with a trough or hanging feeder. Hanging tube feeders are best for small flocks. Height of hanging feeders can easily be adjusted as the birds grow.



The day before the chicks arrive, turn on the brooder lamp. Fill waterers and feeder pans. Turning the lamp on early allows litter and equipment to warm. This helps make the chicks comfortable.

When the chicks arrive, place them under the heat source. The temperature should be at 85-90 degrees Fahrenheit for the first three or four days. The best guide to adjusting the temperature should be the chicks themselves. Their actions will tell you whether they are comfortable or not. The diagram shows you how to do this.

For the first few days, it will be necessary to watch the birds closely. Adjust the brooding temperature as necessary. The temperature can be increased by lowering the heat lamp. It can be decreased by raising the heat lamp. Supply fresh feed and water daily. Artificial light should be provided 24 hours a day. One 40-watt bulb provides adequate light for pens up to 20 feet square.

Growout Management

The growout period for broilers includes the time after brooding until market size is reached. You must provide the proper conditions, feed and care during the growing period. Keep the house at a comfortable temperature (about 72 degrees). Provide a good supply of fresh air. It is important that the litter remain dry. Remove wet spots and add fresh litter. Wet litter provides an ideal condition for parasites to grow.

Provide fresh feed daily. Do not fill troughs more than two-thirds full, or you'll waste feed. Chickens must have fresh, clean water at all times. Remove waters daily, wash them and fill with clean water.

Birds need light to locate feed and water. They also need light to grow and develop. Broilers and layers need different light schedules. Chicks grown for broilers should receive light 24 hours a day. This encourages them to eat more feed and grow rapidly. Birds grown for egg production or for exhibition should receive about 12 hours of light a day up to 22 weeks of age. A 40-watt bulb will furnish enough light for 25-50 broilers or pullets.

Management for Egg Production and Exhibition

Pullets normally start laying eggs about 22 weeks of age. The average hen lays 260 eggs in one year.

Under natural daylight conditions, chickens lay most of their eggs in the spring as days lengthen. You can use electric lights to make hens think that the days are long. This makes them lay more eggs. A useful rule for lighting laying hens is never to allow day length to decrease. Laying hens require 15 hours of light per day. One 40-watt light bulb provided enough light for up to 100 hens.

Except for controlling day length, hens require about the same management as do broilers and pullets during the growout period. Hens need a comfortable environment, dry litter, fresh feed and water and daily attention.

Laying hens need nests, which can easily be constructed. They should be about 1 foot square and 1 foot high. A small board at the bottom front will help retain nesting material. A perch located below the opening will provide easy access. You should provide one individual nest for every four to five layers.

Feeding

Chickens have simple stomachs. The nutritional requirements are different for each group of birds. It is important to feed chickens a feed designed specifically for them.

Many types of poultry feeds are available from local feed dealers. It is important to select the correct feed. For example, if you are feeding broilers, select a feed designed specifically for growing broilers. Broiler feed should contain 23-24 percent protein. It may be necessary to mix several feeds together to get a 24 percent protein level. To do this, get a feed formula and directions for mixing from your extension specialist. They can calculate the correction combination of feeds for you.

A ration that contains no more than 20 percent protein is good for day-old pullets. Pullets do not need to grow as rapidly as broilers. They need less protein. Older pullets (8 to 20 weeks old) need even less protein. A diet containing 16 percent protein is satisfactory. During egg production, a 15 percent protein diet will support a good rate of lay and keep hens healthy.

Health

Prevention is the best way to deal with poultry disease and parasites. Prevention is better than treatment. Good sanitation and good management help prevent disease.

Follow these important sanitation and management practices:

1. Clean and disinfect house before chicks arrive.
2. Wash and clean waterer daily.
3. Keep litter dry. Remove and replace wet litter.
4. Remove and incinerate or bury all dead birds.
5. Provide adequate ventilation.
6. Isolate flock, limit visitors and keep dogs, cats, etc. away.
7. Control rats and mice.
8. If possible, keep birds of only one age on the farm.

Management and Care of Poultry

1. List three predators of poultry.

2. _____ refers to the care of young chicks during the first two to three weeks of life.

3. The brooder lamp does not need to be turned on until chicks arrive. True False

4. Chicks grown for broilers should receive light 24 hours a day. True False

5. Pullets normally start laying eggs at _____ weeks of age.

6. The average hen lays _____ eggs in one year.

7. Broiler feed should contain a _____% protein level.





If you look at chickens, ducks or any other birds, do they all look alike? Of course not. 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 or 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 by a breeder who does not allow any outside bloodlines to enter into his or her flock for a number of years. The strain is usually named after the breeder who developed it.

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 feathered. They are usually small in size, so they don't require as much feed as the larger breeds.

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



Share

1. How many poultry breeds do you know?
2. What breed might you raise? Why?
3. What are some characteristics that help determine breed or variety?
4. What are the main functions of different breeds or varieties? (exhibition, egg production, meat production or pleasure/recreation)
5. How do poultry breeds differ between species (chickens, ducks, geese, etc.)?
6. What are significant differences between breeds of other animals?
7. What is the importance of different poultry breeds to people?



ALLEN COUNTY 4-H POULTRY RECORD



Records serve as a way to measure your own success with a project. When answering these questions, you should be able to see where improvements can be made for next year and if you wish to continue with this project for another year.

Commercial					
Class	Breed	Date Purchased	Number Purchased	Cost of Birds	Number of Birds Dead/Lost
Broiler					
Turkey					
White Egg Layer (Over 6 Months)					
Colored Egg Layer (Over 6 Months)					
White Egg Pullet (Under 6 Months)					
Colored Egg Pullet (Under 6 Months)					

Exhibition					
Class	Breed	Date Purchased	Number Purchased	Cost of Birds	Number of Birds Dead/Lost
Standard Exhibition					
Waterfowl					
Clean Legged Bantams					
Feather Legged Bantams					

List the equipment/housing arrangements needed for your project. Include feeding equipment, bedding, housing, grooming tools, etc. that you use to care for your animal(s).

Item	Approximate Value

List the items you feed to your animals. Include type of feed, quantity, costs		
Type of Food	Amount Fed	Expense - Value of Feed

List veterinary expenses you had with this project (vaccinations, illness, health certificates, etc.)

List three new things you have learned about raising birds.

- a. _____
- b. _____
- c. _____

What resources did you use to gain more information about your animals? (List people, magazines, newsletters, web sites, etc.)

Did you give a demonstration in your local 4-H Club? Yes _____ No _____ If yes, list the date given, title of demonstration and number of people present.

List any tours, workshops, clinics, etc you participated in relating to this project.

**You may exhibit in all ten classes offered
Two Pen per Class.**

Educational Poster exhibit is due and judged on designated date in exhibit building. Watch the Clover Chronicle for this date.

**** Copy of Receipt Showing date of purchase *MUST* be attached to these pages for Broilers, Pullets and Turkeys.**

I understand that the 4-H Livestock Committee may assign a specific location or pen for my animal(s). I understand that I may be subject to additional pen fees due upon time of unloading for my animals.

I further understand that to exhibit at the Allen County Fair is a privilege and that I must adhere to all rules and regulations set forth by the Indiana Board of Animal Health for Exhibition, by the Purdue Extension Service 4-H Youth Development program and the Allen County 4-H Clubs, Incorporated.

4-H Member Signature: _____ Date: _____

____ Completed v2.4online enrollment by January 15, 2021

____ Completed Fair Entry on line by June 30, 2021

____ Copy of YQCA Certificate attached