

Sand and Sage Round-Up
MARKET CHICKEN STUDY GUIDE
Senior Division
(14 years of age and over as of December 31)

Questions will come from:

Colorado 4-H Ethical Care of Poultry handout
Meat Quality Assurance
Market Chicken Study Guide

You should know the meaning of the following terms.

Albumen - The liquid portion surrounding the yolk of an egg.

American Standard of Perfection - Official reference book of American Poultry Association; gives complete descriptions for all breeds and varieties of poultry recognized by the Association.

Avian - Relating to or pertaining to birds of all feathered species.

Axial feather - The short feather in the middle of the wing that separates the primary feathers from the secondary feathers. Also called key feather.

Back - The rear part of the body from the neck to the end of the spine.

Bantams - Miniature chickens, usually one-fourth to one-fifth the weight of regular chickens.

Barred feathers - Having alternate bands of different color.

Beak - The horny mouth parts of chickens, turkeys and upland game birds.

Bird - An individual of any avian species.

Body feathers - The main group of feathers located on a bird's body.

Breast - Front of body, from point of keel to base of neck.

Breed - A group of birds related by breeding with the same physical traits.

Chick - A newly hatched chicken of either sex.

Cock - A male chicken more than one year of age.

Cockerel - A male chicken under one year of age.

Comb - The fleshy protruding part on top of the head of a chicken.

Coop - The place where chickens are kept; at shows, the cage in which a chicken is exhibited.

Crop - The enlarged part of the gullet, between the neck and body, in which food is stored temporarily and softened for digestion.

Cushion - A mass of feathers over the back and base of the tail of a chicken, giving it a rounded effect.

Flock - A group of chickens living together.

Fryer (Broiler) - A young, meat-type chicken, usually processed before eight weeks of age.

Gizzard - An organ that contains grit for grinding up the grain poultry eats.

Hen - A female of many avian species.

Keel - The lower portion of the breast bone.

Keel bone - The breast bone or sternum.

Meat-type - Large bodied, fast growing and heavily muscled chickens.

Pullet - A female chicken less than one year old.

Roaster - A young, meat-type chicken, usually processed at 3-4 months of age weight 4-6 pounds. Spur - Stiff horny projection on the rear innermost portion of the shank.

You should know how to figure:

Profit or loss on your project.

Total income minus total expenses

\$100 income per pen minus \$66.00 expenses = \$34.00 (total profit)

You should know:

There are over 150 breeds of poultry and 340 different color combinations. From four original “wild types” (naturally occurring) of chickens, breeders have developed more than 60 distinct breeds of chickens.

In 1993, every person in the United States consumed an average of 77 pounds of broilers (ready to cook weight), 18 pounds of turkey meat and 234 eggs.

Types of combs are single, V-shaped, rose, pea comb, buttercup, cushion and strawberry.

The rear back area of the male is called the saddle and on the female a cushion.

Neck feathers are called hackle feathers on the male (pointed) and cape feathers on the female (rounded).

A variety is a subdivision of a breed. A variety is identified by either feather color (black, white, red, brown), bearded or non-bearded, presence or absence of muffs or comb type. A breed may have many varieties.

An egg has four parts: Chalaza, Albumen, Yolk and Germ spot.

Eggs are one of nature’s most complete foods. The reason for an egg’s high nutritional value is that it supplies the developing chick its only source of food while inside the egg. This explains the perfect balance of the six nutrients essential for growth.

A pullet begins to lay eggs between 18-20 weeks of age.

It takes a fryer 42-47 days to reach 3.8 pounds market weight.

Provide adult birds with at least two square feet in a coop or hen house.

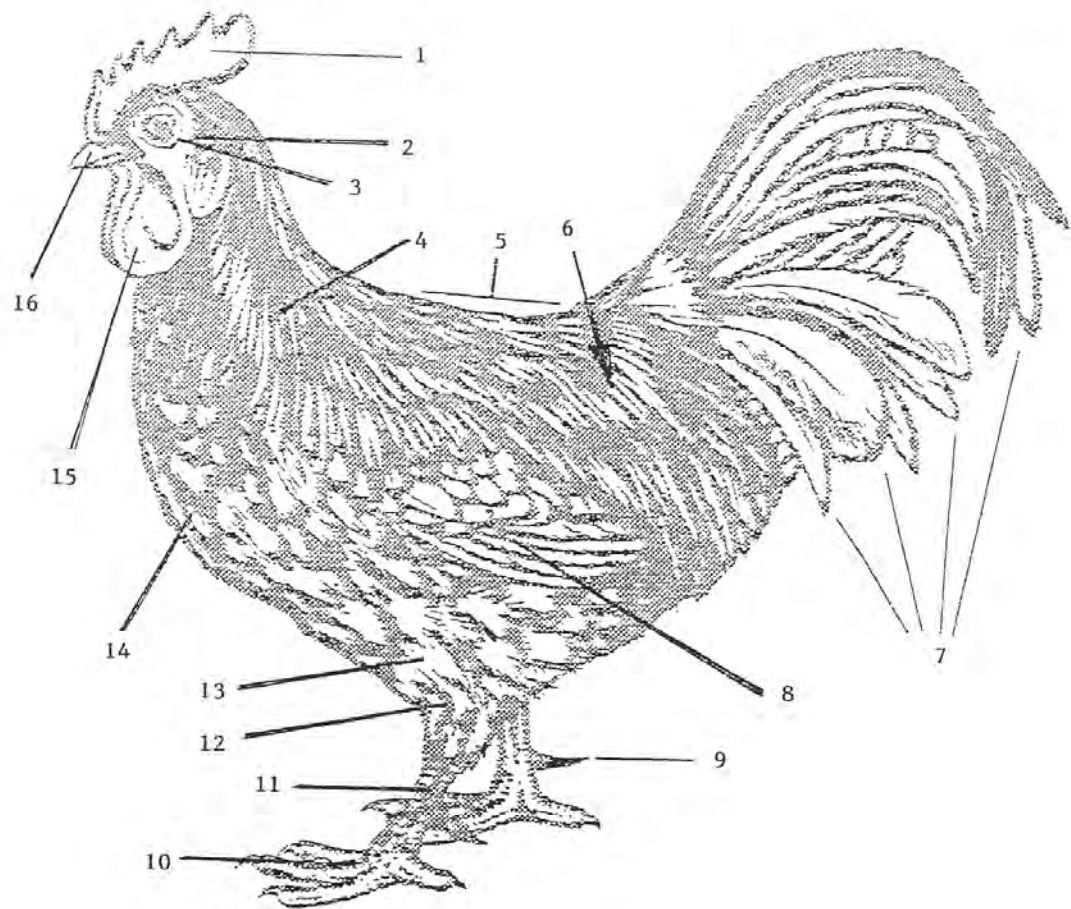
Provide 3-4 inches of a type of litter that doesn’t compact or cake.

Use a starter mash of 18-22% protein for the first 4-8 weeks and a growing mash of 16-18% protein for 8-12 weeks.

A chicken will lay up to 270 eggs per year.

It takes a fertile incubated chicken egg 21 days to hatch.

Chickens are probably the most common bird in the world and are raised on every continent.



Parts of a Chicken

- | | | | |
|-----------|--------------------|--------------------|------------|
| 1. Comb | 2. Ear | 3. Eye Ring | 4. Hackles |
| 5. Back | 6. Saddle feathers | 7. Sickle feathers | 8. Wing |
| 9. Spur | 10. Toe | 11. Shank | 12. Hock |
| 13. Thigh | 14. Breast | 15. Wattles | 16. Beak |



COLORADO 4-H ETHICAL CARE OF POULTRY

(Includes chickens, turkeys and waterfowl.)

Raising poultry can be interesting and profitable. Your 4-H poultry project will acquaint you with the value of following a program that stresses good practices.

Feed and Water

Give poultry nutritionally balanced, palatable rations. Feed should be available on a free-choice basis. A common oversight with many poultry projects is to blend the nutritionally balanced diet with lower protein grains, such as corn or barley. This reduces the overall quality of the diet and often can result in birds which do not have a healthy appearance or do not grow to their potential. One should always feed the proper diet and not attempt to cut corners by mixing balanced rations with other feeds.

Water should be clean, fresh and cool. Because water is the most essential nutrient, it should be available to the bird at all times. Take care to reduce spillage which can result in undesirable and possibly uncomfortable conditions.

Handling

Handle poultry sufficiently prior to being exhibited so they are used to people and less likely to become overly excited. Refer to 4-H poultry manuals for detailed handling information. Poultry familiar with human touch and voices will be calm when handled by judges. Poultry do not like sudden movements or loud noises. Avoid placing your birds in situations that cause them to be frightened.

When holding poultry, take care to reduce stressful conditions that could excite the bird. Birds are more comfortable if held securely against the side of your waist, with your arm placed over the back of the bird to restrict wing movement. Place your hand under the bird to provide support. Do not allow the bird to flap its wings while being held. This could result in injury to both you and the bird.

Housing

House birds in either cages or buildings prior to exhibiting. Housing is essential to the proper welfare of the bird. Protect birds from predators and neighborhood dogs and cats.



In situations where poultry will not be housed in cages until they are transported to a show, place birds in cages periodically so the cage is not unfamiliar.

Cages should provide adequate space for birds to stand and lay down freely. They should be able to move about the cage, turn around if desired and access both feed and water comfortably. Construct cages of either wood or wire. Take care to assure no sharp objects are present that will cut, scratch or otherwise injure the bird.

Veterinary Care

Vaccinations are an afterthought for most species of poultry in project situations. Newcastle and bronchitis vaccines are available through poultry supply catalogs. Sanitary practices, such as providing clean housing, feeding and watering equipment, is a must to minimize disease risk and promote bird comfort.

Antibiotics are appropriate in poultry for disease situations. In no case should mood altering drugs be used.

Showing

Preparing birds for shows requires little more than cleaning the feathers, feet and heads. A damp cloth or sponge removes dirt or feces. Frayed feathers often are the result of poor husbandry. Do not pull frayed feathers from the bird in order to improve appearance. Provide appropriate care throughout the project so the bird exhibits a smooth feather cover.



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