

Plentiful Poultry

Summary: Students explore information about different types of common poultry and perform egg experiments.

Objectives:

The students will:

- Identify various types of poultry as common animals on Pennsylvania farms.
- List at least three products or by-products of poultry.
- Identify at least three characteristics of poultry.
- Describe at least three facts about eggs.

Materials:

Activity #1:

- book, Chicks & Chickens by Gail Gibbons (and/or similar books about chickens)
- paper to make a homemade book

Activity #2:

- Inspect An Egg:** uncooked egg, bowl
- How Strong Is An Egg?** uncooked egg, bowl
- Egg Roll:** uncooked egg, newspaper

Activity #3:

- books and other research materials about chickens, turkeys, ducks, and geese
- materials for making charts and graphs

Getting Started:

Activity #1:

- Find the book and other resources about chickens and eggs that will help you gather facts for the class book.

Activity #2:

- Buy eggs in advance.

Activity #3:

- Find some resources on chickens, turkeys, ducks, and geese. Have them available for students to look at and for you to review together in class.
- If students do not know how to create charts and graphs with data that they have collected, you may want to teach a short lesson about how to do so prior to doing this activity.

Background:

Chickens, turkeys, ducks, and geese are farm animals that can be grouped under the heading of poultry. These birds are known for producing eggs, meat, down, and feathers, which can provide us with many different useful edible and non-edible products.

Chickens can be differentiated from the others because of two physical features: the comb and the wattles. The comb is the red appendage that sits on top of a chicken's head and the wattles are the two appendages that



Grade Level: K-6

Topic: Common animals on Pennsylvania farms

PA Environment & Ecology Standards Addressed:

Agriculture and Society:

4.4.4.B: Identify the role of the sciences in Pennsylvania agriculture.

- Identify common animals found on Pennsylvania farms.
- 4.4.4.C: Know that food and fiber originate from plants and animals.
- Identify agricultural products that are local and regional.

Teaching Methods:

- Lecture/Discussion
- Hands-on Activities
- Research

Multiple Intelligences Utilized:

- Naturalistic
- Interpersonal
- Logical/Mathematical
- Verbal/Linguistic
- Visual/Spatial
- Bodily/Kinesthetic

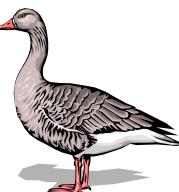
hang under the beak. Chickens have a beak and no teeth. They have to swallow their food whole and use a specialized part of their stomach called a gizzard to grind it up. Chickens are highly social animals that bond closely with other animals, including humans. A male under one year of age is called a cockerel and a male that is older than one year is called a cock or a rooster. A female less than one year old is a pullet, and a female over one year old is a hen. There are over 150 varieties of domestic chickens, and there are more chickens than people on the Earth. Americans consume around eight billion chickens annually.

Turkeys can be identified by their large tail feathers that males fan out when the birds are courting or scared. Turkeys also have several appendages such as the caruncle, which is the red fleshy growth on the head and upper neck, and the snood, which is the red fleshy growth at the base of the beak, which hangs over the side of the beak. The wattle is similar to that of a chicken's in that it hangs at the turkey's neck, and the beard is a lock of hairy feathers that can be found on a male turkey's chest. The American Poultry Association recognizes eight breeds of turkeys. They are Bronze, Narragansett, White Holland, Black, Slate, Bourbon Red, Beltsville Small White, and Royal Palm. Broad-Breasted White turkeys, which are descendants of the White Holland, are most commonly raised for commercial use today. Mature males are called toms, immature males are called jakes, mature females are called hens, and baby turkeys are called pouls. Only male turkeys "gobble." Turkeys are social animals who like to live and feed in flocks.

Ducks are also very social animals who use vocalizations and body language to communicate with each other. Males, called drakes, often live in pairs with females, called hens, and their young ducklings. Ducks often spend time in larger groups as well. Hens can lay up to two hundred eggs in a year. The eggs are similar in size or slightly larger than turkey eggs. They are off-white to yellowish in color.

Geese, unlike ducks, tend to group in pairs to raise new families each year, and often stay together for life. One unique characteristic of geese is that, when flying in a group known as a gaggle, they form a huge "V" across the sky. This technique helps each bird fly farther than if it were flying alone. If a goose falls back it will take advantage of the lifting power of the birds in front of it. When the lead goose gets tired, it moves back in the formation and lets another goose take over. The others often honk to encourage the others to keep up the good work.

There are wild chickens, turkeys, ducks, and geese in different parts of the world, but we have come to rely greatly on the domesticated versions, and agriculture provides us with their many resources.



Activity #1: Chicks & Chickens

- The book Chicks & Chickens by Gail Gibbons is a great introduction to the subject. Read it and/or other books on the subject.
- Ask students to help you compile a list of facts about chickens and eggs.
- Create a class book about the things you learned about chickens and eggs.
- Ask students to write the information and illustrations on the pages.
- When completed, bind the book and give students the opportunity to read the story aloud to each other.



Activity #2: Egg Olympics

- Eggs are amazing entities. Find out more about them through these mini-experiments from Where Do Chicks Come From? By Amy Sklansky.
- **Inspect An Egg:** Break an uncooked egg into a bowl, trying to keep its form intact. Examine it closely. Can you identify the different parts such as the yolk, albumen, and what looks like twisted white strings--the chalazae (pronounced kuh-lay-zee)? What do these parts do for a developing embryo/chick if the egg is fertilized?
- **How Strong Is An Egg?** Hold an uncooked egg in the palm of your hand over a bowl. Squeeze as hard as you can. The egg should not break unless there is a crack in the egg. The eggs need to be strong enough to withstand the weight of the hen as she sits on them.
- **Egg Roll:** Spread some newspaper on the floor or a tabletop. Place an uncooked egg on the paper and give it a push. How does it roll? Does it roll straight or in a circular motion? Is it fast or slow? Why does it roll this way?

Activity #3: Poultry Comparison

- Research some of the main types of poultry that live on farms such as chickens, turkeys, ducks, and geese. How are these birds similar? How are they different? What types of products do they provide (edible and non-edible)? How many eggs of each are laid annually per hen? How often does each species lay an egg? Compare incubation periods. Which one is eaten most often in the United States on a daily/yearly basis? The possibilities are endless...
- Create charts and graphs to display the results.
- Ask students to present the results to the class using the visual aids.

Extensions/Variations:

- Research the nutritional benefits of an egg. How many recipes can you find? Make some and have a taste test.
- Study the different breeds of chickens (or different types of poultry). Let students choose one and write a short report about the breed's characteristics. Find pictures of each type on the web.
- “Why did the chicken cross the road?” Create a bulletin board of crazy facts and jokes about chickens. There are plenty of them out there. See web sites listed in reference section for starters.

Evaluation:

Rubric: Plentiful Poultry

3	2	1	0	The student can identify various types of poultry as common animals on Pennsylvania farms.
3	2	1	0	List at least three products or by-products of poultry.
3	2	1	0	Identify at least three characteristics of poultry.
3	2	1	0	Describe at least three facts about eggs.
12	8	4	0	Total Score: /12



Resources:

Baker, K. (1994). Big fat hen. Harcourt Brace & Company: NY.

Gibbons, G. (2003). Chicks & chickens. Holiday House: NY.

Sklansky, A. (2005). Where do chicks come from? HarperCollins Publishers, Inc.: NY.

<http://www.urbanext.uiuc.edu/eggs/res08-whatis.html>
(University of Illinois Extension)

<http://shilala.homestead.com/chickenfacts.html>
(chicken facts)

<http://www.vfr.net/~tbruce/facts.htm> (chicken facts)

Fun Facts!

If laid head to claw, KFC chickens consumed worldwide would stretch approximately 275,000 miles! They would circle the Earth at the equator 11 times and reach about 50,000 miles past the moon!



