

Poultry

Alaska Agriculture in the Classroom for Pre-K (Ages 3-5)

Lesson Goal

The goal of this lesson is to teach Pre-K students how to recognize poultry and to care for them, and to understand that poultry products provide nutrients for personal health.

Student Objective

The student will be able to participate in a physical activity, participate in a group activity, recognize the images of poultry and their family members, understand why poultry are raised and how to care for them, participate in making



food products, and to make healthy food choices.

Activities

- **Story Time:** Agriculture in Alaska and Children's Books
- **Exploring:** Poultry, Chicken Life Cycle, Eggology, The Little Ducklings and Hatching Eggs
- **Creating:** Quacking Ducks and Eggheads
- **On the Go:** Duck-Duck-Goose, Egg-cited Relays!, and the Chicken Dance
- **MyPlate:** Making Healthy Food Choices, Chicken-fried Rice, and Hard-boiled Eggs

Vocabulary

Hen, rooster, chick, yolk, egg, and rafter.

Rubric

Alaska Early Learning Guideline Domains	Student Target	Facilitating Activities
1 – Physical Well-Being, Health, and Motor Development	The student participates in a physical activity, involving coordination and movement. The student recognizes and participates in making and eating nutritious foods.	<ul style="list-style-type: none"> • Duck-Duck-Goose, Egg-cited Relays!, and The Little Ducklings • Making Healthy Food Choices, Chicken-fried Rice, and Hard-boiled Eggs
2 – Social and Emotional Development	The student participates in a group activity, displays cooperative teamwork to accomplish a group goal, and recognizes individual contributions.	<ul style="list-style-type: none"> • Egg-cited Relays!, Duck-goose-Swan, and Hatching Eggs.
3 – Approaches to Learning	The student sustains attention on a multi-task project with specified requirements.	<ul style="list-style-type: none"> • Chicken Life Cycle and Hatching Eggs
4 – Cognition and General Knowledge	The student communicates comprehension by recognizing the images of animals and is able to show understanding of how to care for them. The student is able to choose healthy foods.	<ul style="list-style-type: none"> • Chicken Life Cycle, Hatching Eggs • Making Healthy Food Choices
5 – Communication, Language, and Literacy	The student listens with attentiveness and curiosity. The student mimics sounds and actions.	<ul style="list-style-type: none"> • Agriculture in Alaska, Children's Books and Turkeys, Duck-Goose-Swan • The Little Ducklings

Story Time!

Agriculture in Alaska

Anchorage Chicken Lady

We didn't have chickens when I was a kid, but I always hoped that someday I would be the lucky owner of a backyard flock. My dream came true when a friend could no longer care for her flock and she gave me 5 chickens for my backyard. How exciting! We quickly built a coop and bought some feed. Now I get up every morning to let them out and end every day with closing their coop door. Chickens love routine so be prepared to have a chicken schedule for feeding, watering, observing, and coop cleaning. Did you know that chicken poop is great for the compost?

My favorite chicken adventure yet has been hatching babies under a mama chicken which is called hen. Sometimes hens go "broody" and really want to hatch some eggs and take care of chicks. My hen became broody, but we didn't have any hatching eggs - what to do?! I called a friend who gave me 7 fertilized eggs. I waited until nighttime when the hen was sleepy and calm, put the eggs in a separate nesting box, and then put the hen on the fertilized eggs. We waited 21 whole days! I took her food and water every day and listened for little 'peep' noises. Finally, our day came! Five of the 7 chicken eggs hatched.



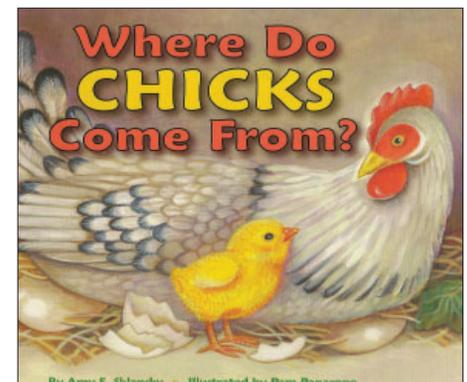
Sometimes eggs don't hatch at the end of incubation, and that's ok and very normal. Mama hen was very proud of her five babies, all different colors—yellow, black, brown, and even gray!

Chickens are so fun and funny! They each have a personality—some are bossy, some are kind, and some are hungry all of the time. They give us food every day in the form of eggs and hours of endless entertainment. Good luck with your flock!

Rachael Miller - Anchorage AK



Children's Books



Materials

- The book Where do Chicks Come From? by Amy Sklansky

- Images of Chickens and Chicks

1. Read Where do Chicks Come From? to the class.
2. Discuss the differences between hens, roosters, and chicks. Note that roosters can be more colorful than hens within the same breed.
3. Using the images of Chickens and chicks, discuss the different body parts.
4. Read a word from the vocabulary list and have the students point to body part on the chicken or chick.

Exploring

Poultry

Materials

- Images of poultry
- Image cards of similarities and differences

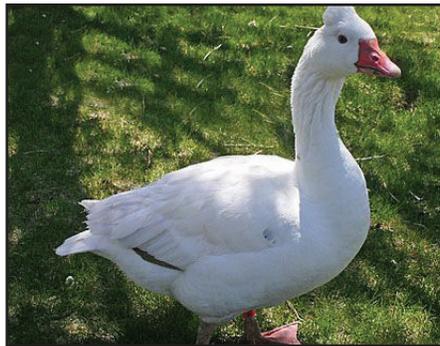
1. What are poultry? Poultry is the name given to birds that provide us with meat or eggs. Chickens, turkeys, ducks, and geese are the birds most commonly kept by farmers. All types of poultry have two wings, two scaly legs and are covered in feathers, but they can be different from each other too.

2. Lay out the poultry images and description cards. Have the students sort them based on the similarities and differences as you discuss the following information.

3. Chickens and turkeys are similar in two ways. They both have feet called claws. These claws are very strong for scratching the earth and finding food. Also, they both have sharp beaks for pecking at insects and grain.

4. Ducks and geese are also similar to each other. They both have bills, which help them to eat certain types of food. The duck's bill allows it to feed in water while the goose's bill allows it to pick up grass. Both the duck and the goose have webbed feet, which help them to swim.

5. Although most birds use their wings to fly, chickens are not good at flying. They can fly up



onto their perches or over a fence, but they spend most of their lives on the ground. Ducks and geese can fly very well. If they are being kept in an open-topped pen, they must have the feathers of one wing shortened so that they cannot take off. Clipping the feathers is like getting a haircut and doesn't hurt the bird.

6. All of these birds can live in the wild but are often kept on farms as domesticated pets or for eggs and food.

7. Ducks, geese, and swans are called 'waterfowl,' because they are often found in places with water like ponds, streams, and rivers. They have highly waterproof feathers, so when diving underwater, the

downy under-layer of feathers right next to their skin stay completely dry.

8. Poultry can be omnivorous and will eat grass, aquatic plants, insects, seeds, fruit, fish, crustaceans, and other types of food.

9. Poultry mothers will keep their brood (babies) together to protect them from predators and will fill their nests with soft down feathers her body.

10. Baby chickens are called chicks and baby turkeys are poult. Geese and swans have goslings and ducks have ducklings.

11. Humans use duck and goose feathers in coats, pillows, and blankets, because they are warm and soft. We also eat duck and goose eggs and meat.

Quack-Gobble Mimicry:

Demonstrate the sounds of poultry and other animals by speaking them out loud and have the students mimic them. The chicken 'cackles,' the cock 'crows,' the turkey 'gobbles,' the duck 'quacks,' the goose 'hisses,' the cattle 'low,' the sheep 'bleats,' the sheepdog 'barks,' the pig 'grunts,' and the horse 'neighs.'

Poultry Anatomy:

Compare poultry and human physical qualities, such as claws and webbed feet compared to human hands and feet; beaks and bills compared to human mouths. Have students examine images of bird feet or feathers and discuss how they might help birds to eat and fly.

Chicken Life Cycle

Materials

- The book Chicks and Chickens by Gail Gibbons
- Copies of the Chicken Life Cycle Diagram
- Small paper plates
- Crayons
- Staples
- String
- Glue sticks

1. Read the end of the book Chicks and Chickens from page 17 to the end, which discusses a chicken's life cycle.

2. Discuss the life cycle of a human and how it's different from a chicken.

3. Show them to diagram.

4. Go over it as you review the book.

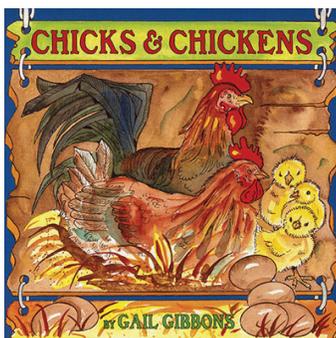
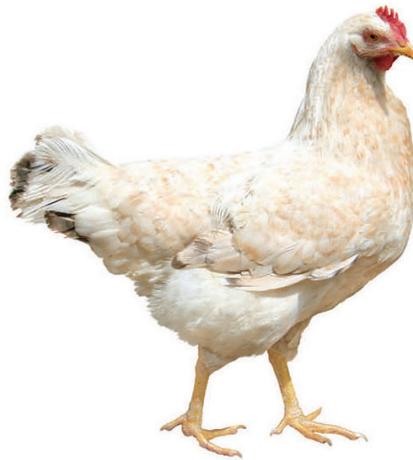
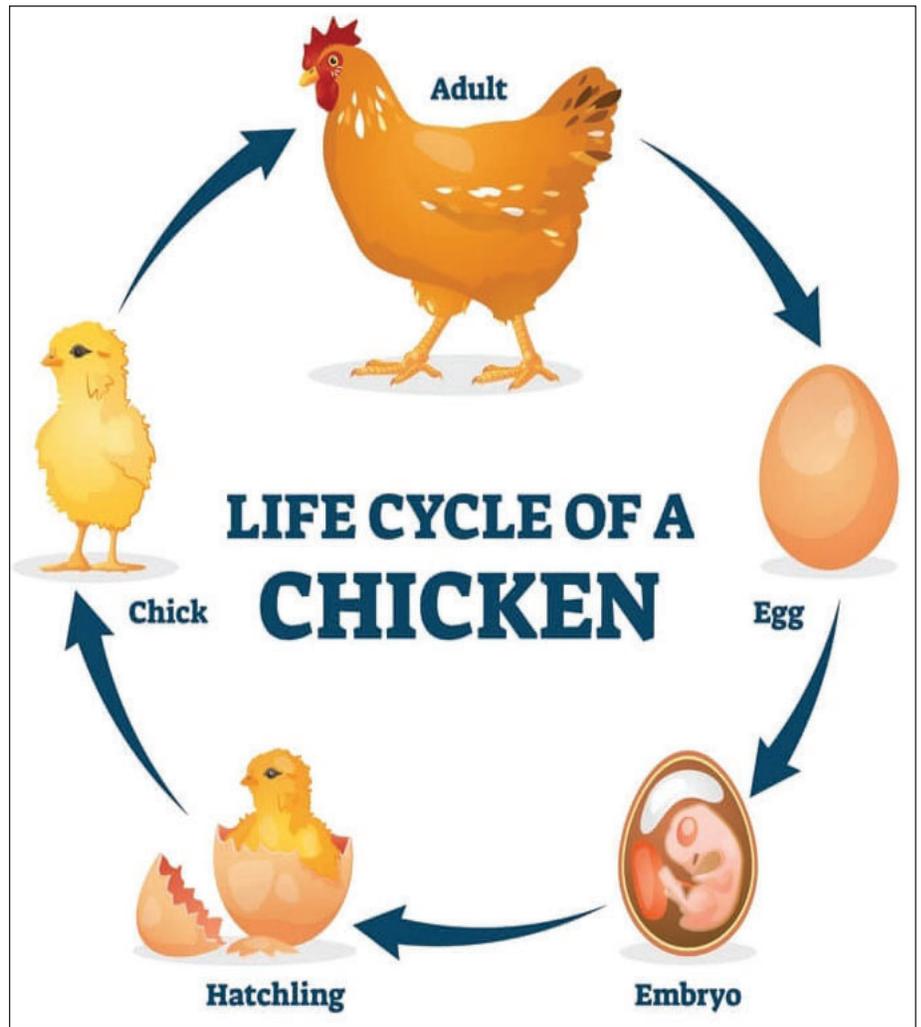
5. Then help them to cut out the individual parts of the life cycle.

6. Demonstrate how to glue the pictures onto the center front of one plate.

7. Punch a hole in the top of the plate.

8. Give each student a length of yarn. Each life cycle part will be glued to a different plate.

9. Attach each plate in order of the cycle.



Eggology

Materials

- Parts of an Egg Diagram
- Crayons
- Scissors
- Glue

1. Explain that eggs contain many essential nutrients for a healthy diet and are high in protein. Eggs are used in breads and sauces– they help bind ingredients together and add color, flavor, and moisture to food.

2. Eggs are produced on farms, by chickens, ducks and turkeys. Eggs can be many sizes, which are determined by the age and breed of the hen.

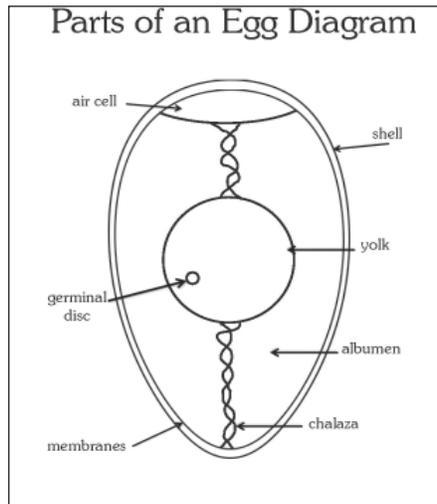
3. Show images and discuss that chicken embryos need air, food, water, and the proper temperature and humidity to develop into a healthy chick to be ready to hatch out of the egg.

4. Explain the parts of an egg and their functions in order to understand how a chicken embryo's basic needs are met inside the egg.

5. Divide the students into groups. Carefully break open one unfertilized (grocery store) egg per group into a shallow container.

6. Using the 'Parts of an Egg Diagram' and toothpicks, have the students locate each part of the egg. You may need to use spoons to gently flip the yolk if the germinal disc is not visible

7. Have students color the parts of the egg diagram and repeat the parts as they color.



The Little Ducklings

1. Explain to the students they will be singing a song about the life of baby ducks–ducklings.

2. Sing the first line and demonstrate what they should do as the first line is sung. For example, standing up and getting in line.

All the little ducklings line up in a row.

(Stand up and get in line.)

Quack, quack, quack, and away they go!

(Make quacking noises and clap hands with them straight out in front of you to mimic a ducks bill.)

They follow their mother, waddling to and fro.

(Place hands behind your back and wag them like a tail and waddle–rock back and forth from foot to foot.)

Quack, quack, quack, and away they go!

(Make quacking noises and clap your hands with them straight out in front of you to mimic a ducks bill.)

Down to the big pond, happy as can be.

(Smile.)

Quack, quack, quack, they are full of glee!

(Clap hands and smile.)

They jump in the water and bob up and down.

(Jump up, and bob up and down.)

Quack, quack, quack, they swim all around!

(Clap hands and make swimming motions.)

All the little ducklings, swimming far away.

(Make swimming motion.)

Quack, quack, waddle, They'll play another day!

(Clap hands and waddle, repeating 3 times.)

Hatching Eggs!

Extension Project:

Materials

- Fertilized eggs
- Incubator or Candler
- Gloves for handling eggs
- Protected space for the incubator
- Large box
- Food and water

1. Set up the incubator before starting the project. Introduce the incubator and the eggs to the students and discuss the safety rules. Show the eggs to the students and place them into the incubator, one by one. Turn on the incubator, while explaining how it works. Always check the incubator to make certain the temperature is between at 99.5 to 103 degrees.

2. Adequate moisture must be kept in the incubator at all times. Always keep the moisture tray full. This ensures that the proper humidity will keep the air bubble developing, as it should.

3. Mark eggs with an X if turning by hand, which will be done 3 times a day. If using an automatic egg turner, be sure that the pointed part of the egg is pointed down. On the first day and the last three days do not turn the eggs.

4. Have the students take turns turning the eggs, making sure they have washed their hands and wear gloves to avoid contamination of the egg.

5. After three days the eggs can be candled to make

certain they are fertile. Candle by placing the egg over a flashlight in a dark room or over a candling device. If there is a cloudy spot or mass visible, it can be assumed that the egg is fertile. Do not candle after the 18th day.

6. During candling, students should be able to see the blood vessels, the eye (which appears as a black spot), a heartbeat, and movement of the chicks. All clear eggs should be removed from the incubator.

7. Students will record candling observations by drawing and coloring what they see as the chicks mature and creating a small hatching booklet from the drawings.

8. On the 19th incubation day the eggs should be removed from the automatic turner, if used. Do not turn the eggs on days 19-21 of incubation.

9. Do not be in a hurry to remove the hatched chicks from the incubator. Newly hatched chicks can survive up to 3 days without food or water since the yolk of the egg is still providing nourishment for the transitional period from the time the chick hatches until it is fluffed out and able to eat on its own.

10. Remove the chicks from the incubator 24 hours after hatching. Provide them with a warm, dry place, and make sure that food and water are available at all times.



Creating

Eggheads

Materials

- Egg shells, with tops carefully removed
- Grass seed
- Potting soil
- Toilet paper tubes, cut in thirds
- Small paper cups
- Googly eyes
- Pipe cleaners
- Plastic jewels and sequins
- Sharpie markers
- Plastic spoons

1. Give each student an egg and a holder, a toilet paper tube or small paper cup. Remind them the egg is fragile and can easily crack.

2. Have the students decorate their egg with a face using googly eyes, sequins, markers, tissue paper, and stickers. Write the student's name on their holder.

3. Once they have finished decorating their egg help them put a small amount of dirt into the egg with a spoon. Fill about $\frac{3}{4}$ full with dirt.

4. Sprinkle with grass seeds and water. Place egg in holder. Set aside and admire.

5. Advise students to water lightly every day. If they water regularly, the grass will grow and look like hair.



Thankful Turkeys

Materials

- Thankful Turkey handout
- Colored cardstock
- Pencils
- Crayons
- Scissors
- Glue

1. Discuss: Did you know? A group of turkeys is called a rafter. The red fleshy appendage that hangs from a turkey's neck is called a snood. The male turkey is known as a tom. The female is called a hen.

2. Only tom turkeys gobble. Hens make a clucking sound. Can you cluck and gobble like a turkey?

3. Have students use scissors to cut out the turkey and its feathers.

4. Ask students about the things they are thankful for. Write those things on the feathers. Remember, we all need to be thankful for farmers!

5. Have students color the feathers and attach them to the back of their turkey with glue.



Duck Finger Puppets



Materials

- orange, yellow, green and brown cardstock paper
- 3/4-inch circle hole punch
- green and yellow mini cupcake liners
- googly eyes
- scissors
- glue

1. Start by cutting out two circles for your duck finger puppets. One that is about 3 1/4-inches for the body and one that is 2 1/2-inches for the head.

2. Punch two 3/4-inch holes in the bottom of the larger circle. These are the holes for your fingers.

3. Glue the smaller circle at the top of the larger circle, making to leave the cut out finger holes at the bottom of the craft.

4. Cut out a beak from orange cardstock or construction paper and glue it onto the duck face. Then glue googly eyes onto your duck.

5. Cut out a yellow or green small cupcake liner in half, and then cut one of the halves in in half again to make two triangle duck wings. Glue one triangle cupcake liner wing on each side of the duck puppet.

On the Go!

Duck-Duck-Goose

1. Ask the children to sit in a circle.
2. Demonstrate safe tagging: using a light touch, like butterfly wings on the shoulder and unsafe tags like hard contact that might cause the person being tagged to fall.
3. One child is chosen as the fox and walks around the group, lightly touching each player on the head while saying, "Duck," with each touch.
4. When the child says "Goose," the person who was touched gets up and follows the fox.
5. The fox walks or runs around the circle and sits down where the goose was.
6. The goose then becomes the next fox and another round begins.



Egg-cited Relays!

Materials

- Large soup spoons or ladles
- Ping pong balls or light-weight balls that fit the size of the spoons used

1. This is a race of balance and coordination. Divide the children into teams. Have the groups line up at the start line with an egg and a spoon each.
2. Explain that the first person in the team will place the ball on their spoon and run to a marked place about 20-30 feet away.
3. When you say go, the first children will race, as fast as they can without the egg rolling off the spoon, to the finish line. If the egg falls off, they should pick it up and place it back onto the spoon and continue!
4. When the first child returns to the start line, the second child in the team begins the race to the cone.
5. The first team with all of their members make it to the marked cone and back to the start line, wins the relay.

Chicken Dance

Teach the students the chicken dance. Find a copy of the song for the dance:

Here's one on You Tube

<https://www.youtube.com/watch?v=l5slspLfmXM>

Part One: The Chicken Dance Steps

To start, stand with your feet together. Lift your arms out to your sides at shoulder level, elbows bent at right angles, with your hands at ear level. Press your fingers and thumb together so that you can move them open and closed, like the beak of a chicken. Put your thumbs in your armpits and flap your elbows (like they are wings) four times to the music. Bend your knees and wiggle your hips four times to the music, placing your arms and hands low like the tail feathers of a chicken. Straighten your knees and clap four times, with the music.

- Beaks
- Wings
- Tail Feathers
- Claps

Part Two: Polka

The polka is a total of 32 counts. It is easiest to count in four sets of eight. Or just keep moving until the chicken part starts again.

There are many ways you can do the polka, but here are the most popular variations for this dance.

- Skip
- Slide
- Gallop

MyPlate

Making Healthy Food Choices

Materials

- MyPlate Poster
- MyPlate Placemats, laminated for reuse

1. A variety of food choices from each group, multiples of the same types of food, plus some that don't fit into the suggested groups
2. Show the students the laminated MyPlate poster and discuss what it represents. Explain that it shows the five food groups a person should eat from each day to grow up healthy.
3. Point out the different colors and types of foods that belong to each group.
4. Hand out laminated MyPlate placemats.
5. Let students choose five foods from a pile of laminated food choices. Limit them to five choices.
6. Have the students place their foods into the food groups on their MyPlate placemat.
7. Discuss their choices and ask them to trade in some of them for others in order to fill their plate—ending up with a choice for each food group area—a full plate.
8. Discuss how making food choices that fill in each food group area for meals will help them grow healthy.



Hard-Boiled Eggs

Materials

- A large saucepan with a lid
- Water
- Electric heat pad
- A large bowl
- A slotted spoon

Ingredients

- Fresh eggs, 1 per student
1. Fill the saucepan half full of water without the lid. Carefully add the eggs. Bring the water to a full boil. Take the pot off the heating pad and place it onto a potholder.
 2. Cover the pot with the lid and let set for 10 minutes.
 3. Uncover the pot and remove the eggs with the slotted spoon.
 4. Let them cool completely.
 5. Hand one egg to each student and demonstrate how to gently tap the egg on the table to crack and peel the shell off.

Chicken-Fried Rice

Materials

- Electric frying pan
- Mixing bowl
- Whisk
- Small paper plates
- Plastic forks

Ingredients

- 1 tbsp vegetable oil
 - Diced vegetables such as carrots, green beans, onions, and peppers, frozen pea
 - Brown rice, pre-cooked
 - Pre-cooked chicken breasts
 - 2 eggs, lightly beaten
1. Heat the vegetable oil in the preheated electric frying pan over medium heat until sizzling.
 2. Add the diced vegetables and cook stirring frequently for 3-4 minutes, or until the vegetables have softened.
 3. Add the rice and cook for 5 minutes, stirring once a minute.
 4. Move the rice mixture over to one side of the pan and pour in the egg. Let the egg cook for 30 seconds, scrambling it with a fork, then mix it through the rice.
 5. Serve on paper plates after cooling slightly.



References

The activities in this lesson have been, in part, adapted from the following references:

Rubric

Alaska Early Learning Guidelines–<https://www.alaskaelg.org/goals-by-domain/>

Agriculture in Alaska

- Anchorage Chickens by Rachael Miller–Anchorage Chicken Lady

Children’s Books

- Chicks and Chickens by Gail Gibbons
- Chicken Little to Chicken Big, National Agricultural in the Classroom– <https://agclassroom.org/matrix/lesson/560/>

Chicken Life Cycle

- Chicken Little to Chicken Big, National Agricultural in the Classroom– <https://agclassroom.org/matrix/lesson/560/>

Eggology

- Eggs on the Menu, National Agricultural in the Classroom– <https://agclassroom.org/matrix/lesson/607/>
- Eggology, National Agricultural in the Classroom– <https://agclassroom.org/matrix/lesson/541/>

The Little Ducklings

- Child Fun–<https://www.childfun.com/themes/animals/ducks/>

Hatching Eggs

- Embryology, Hatching Alaska

Chicks, Alaska Agriculture in the Classroom– <http://www.fairbankssoilwater.org/user-files//Embryology.pdf>

Quacking Ducks

- Child Fun–<https://www.childfun.com/themes/animals/ducks/>

Eggheads

- Eggheads, Agriculture in the Classroom– <http://www.fairbankssoilwater.org/user-files//Eggheads%20Round%20Table.docx>

Thanking Turkeys

- Thankful Turkeys, Louisiana Agriculture in the Classroom– <https://aitcla.org/poultry>
<https://iheartcraftythings.com/adorable-duck-finger-puppets.html>

Duck Finger Puppets

<https://iheartcraftythings.com/adorable-duck-finger-puppets.html>

Egg-cited Relays!

- <https://www.giftofcuriosity.com/easter-gross-motor-egg-spoon-game/>

Making Healthy Food Choices

- Grow It, Try It, Like It, U.S. Department of Agriculture–

Your Resources:

<https://www.fns.usda.gov/tn/grow-it>

- MyPlate Place Mat, U.S. Department of Agriculture– <https://www.myplate.gov/resources/graphics/myplate-graphics>

Chicken-fried Rice

- Kidspot, Kid Spot–<https://www.kidspot.com.au/things-to-do/activity-articles/egg-and-spoon-race/news-story/83219043770d6818271e695235c915d8>

Resources

- Alaska Early Learning Guidelines–<https://www.alaskaelg.org/>
- MyPlate Poster and Place mat–<https://www.myplate.gov/resources/print-materials>
- MyPlate Tools, Graphics, Print Materials, and Videos–<https://www.myplate.gov/resources>
- Alaska Agriculture in the Classroom Lessons–<http://www.fairbankssoilwater.org/akagintheclassroomlessons.htm>
- National Agriculture in the Classroom Lessons–<https://www.agclassroom.org/matrix>

Chickens



Hen and Chicks

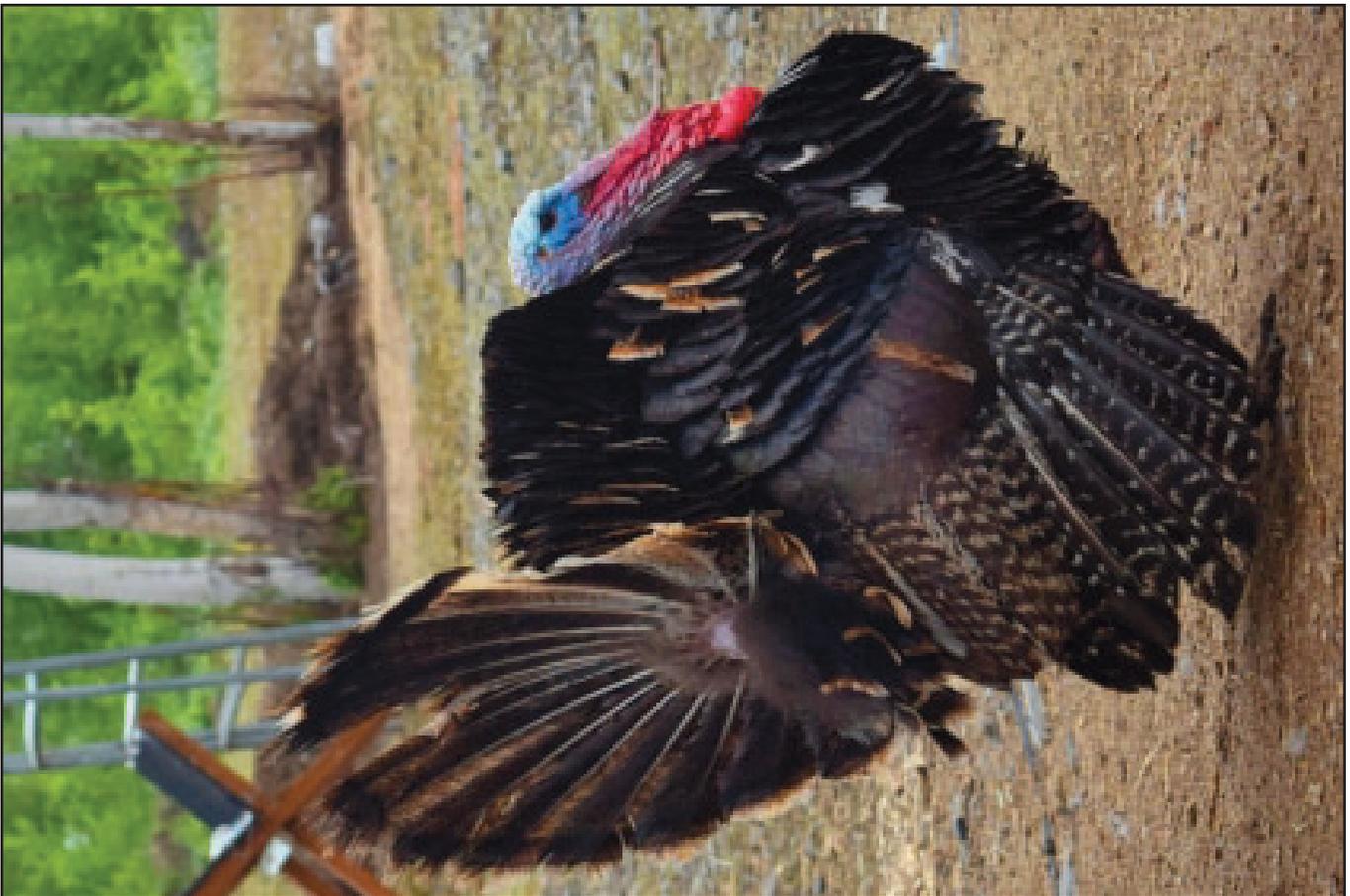


Rooster

Turkeys



Male and Female Turkey



Gobbler/Tom - Male Turkey

Ducks & Geese

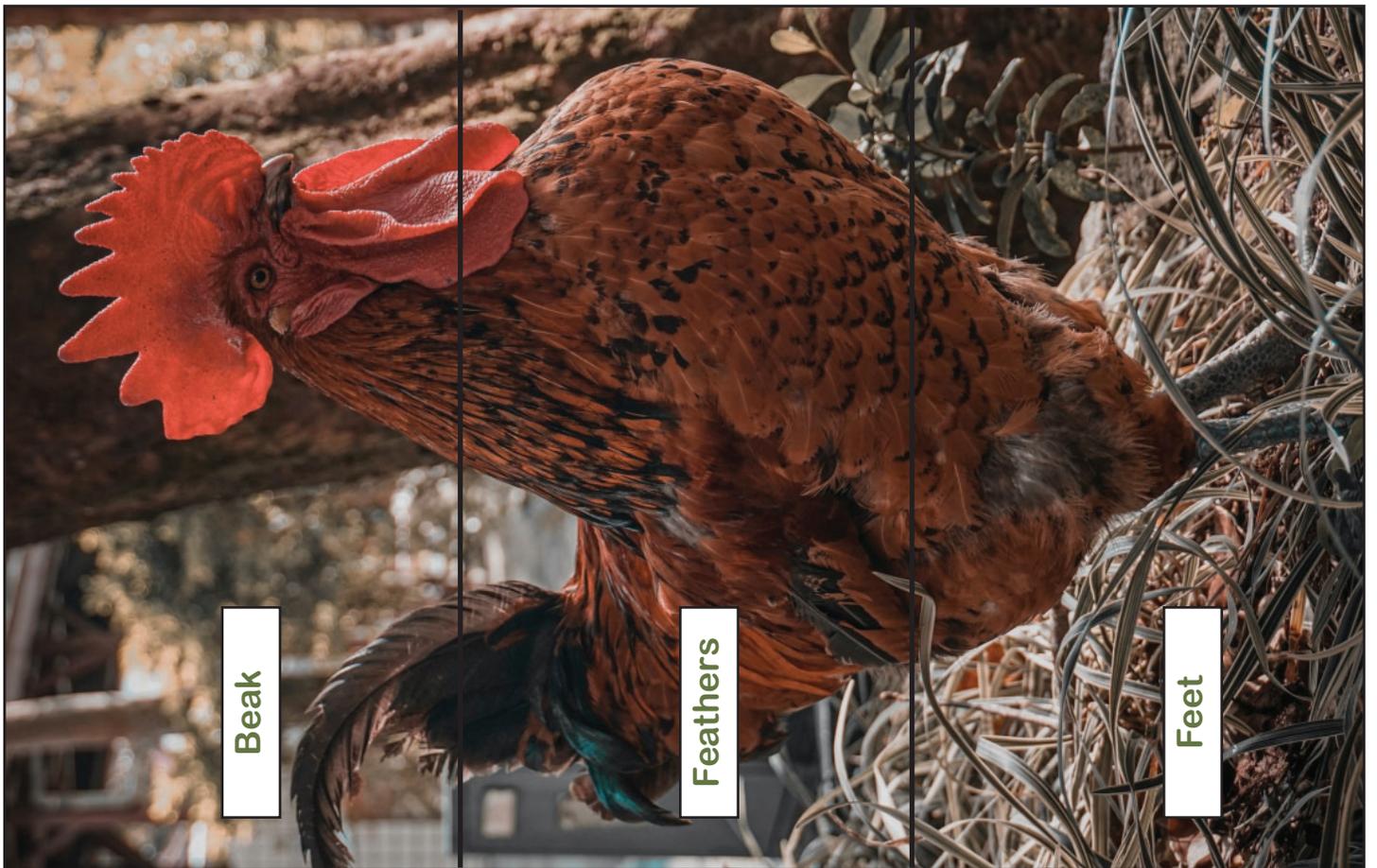
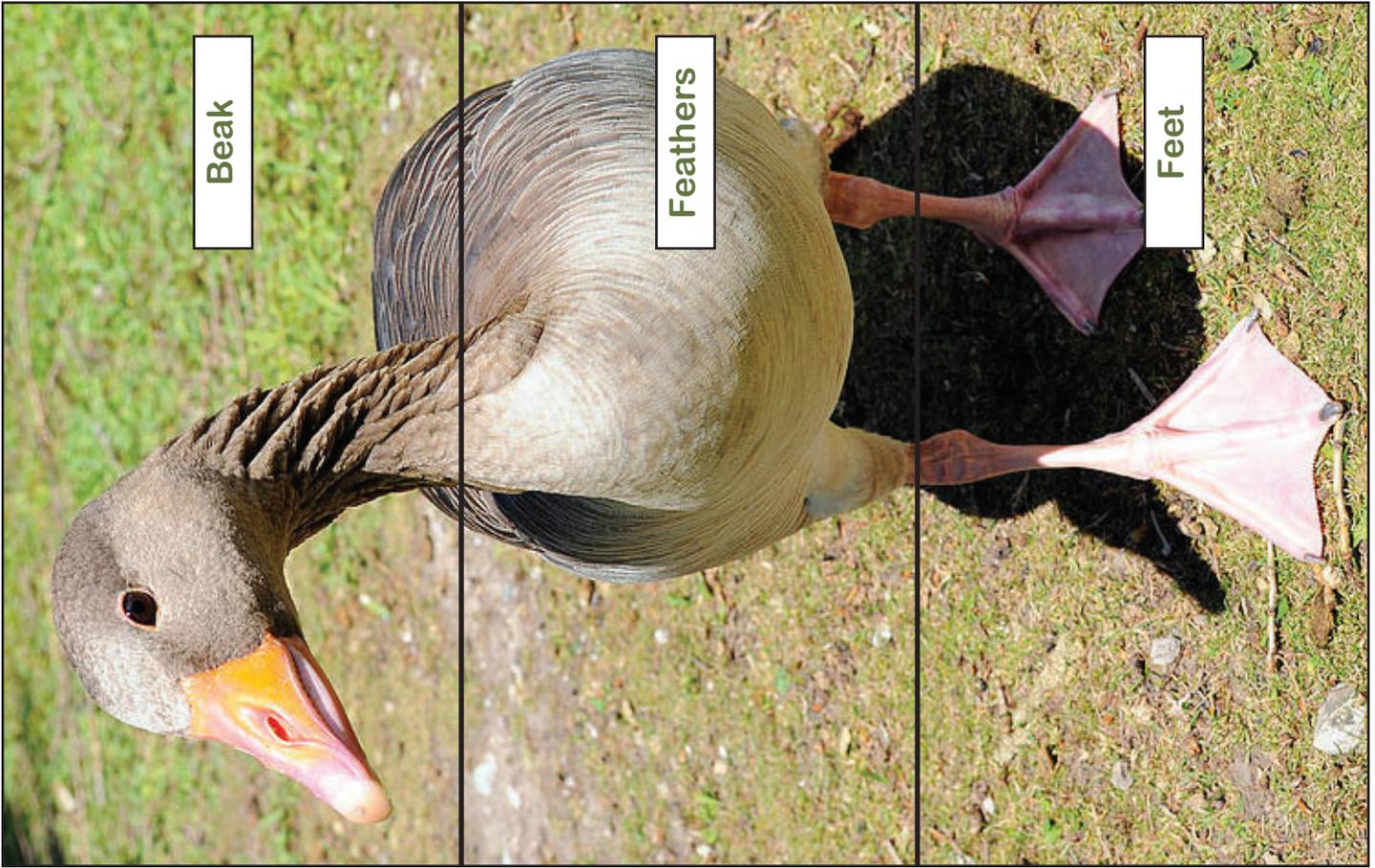


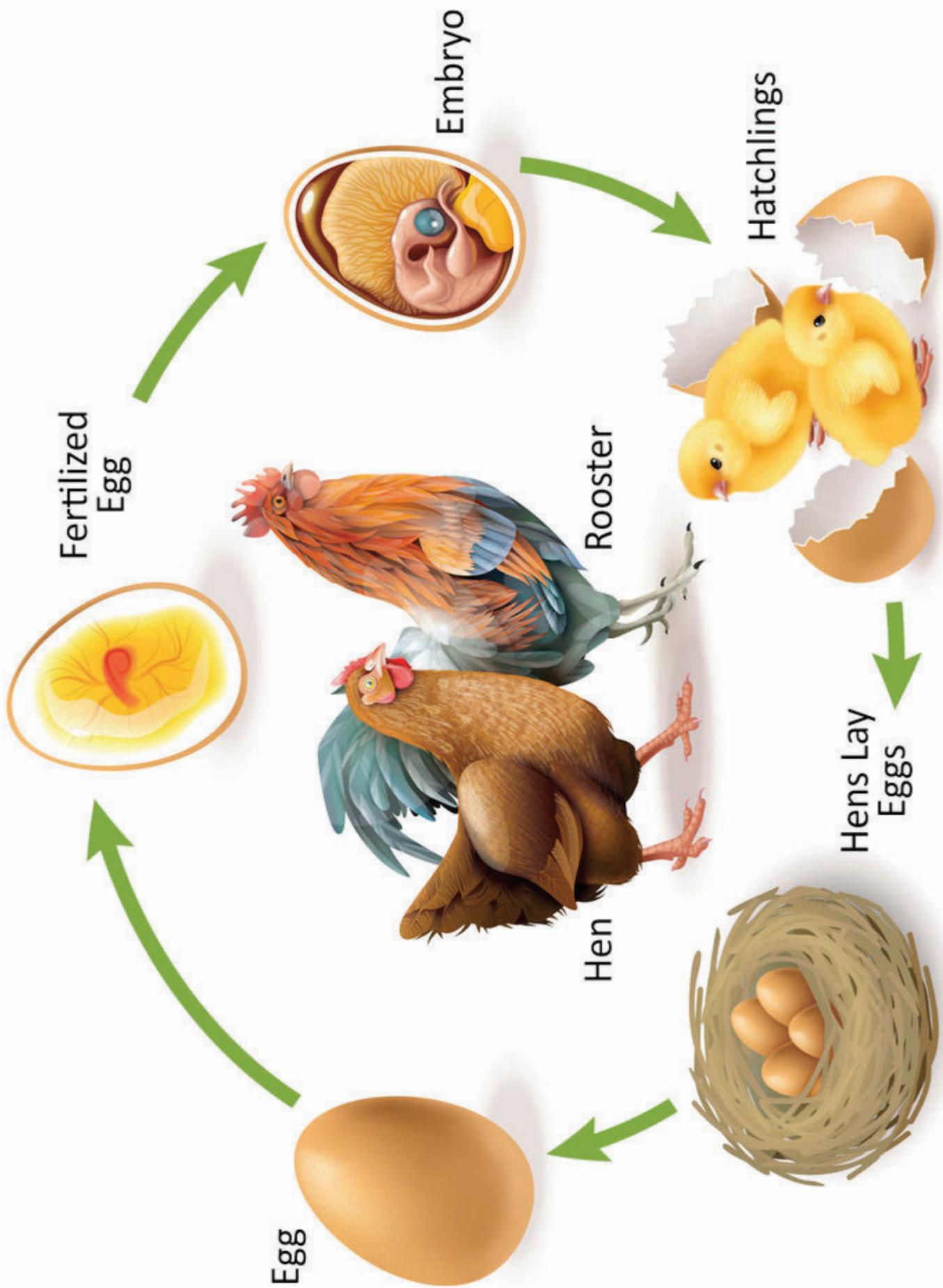
Duck



Goose

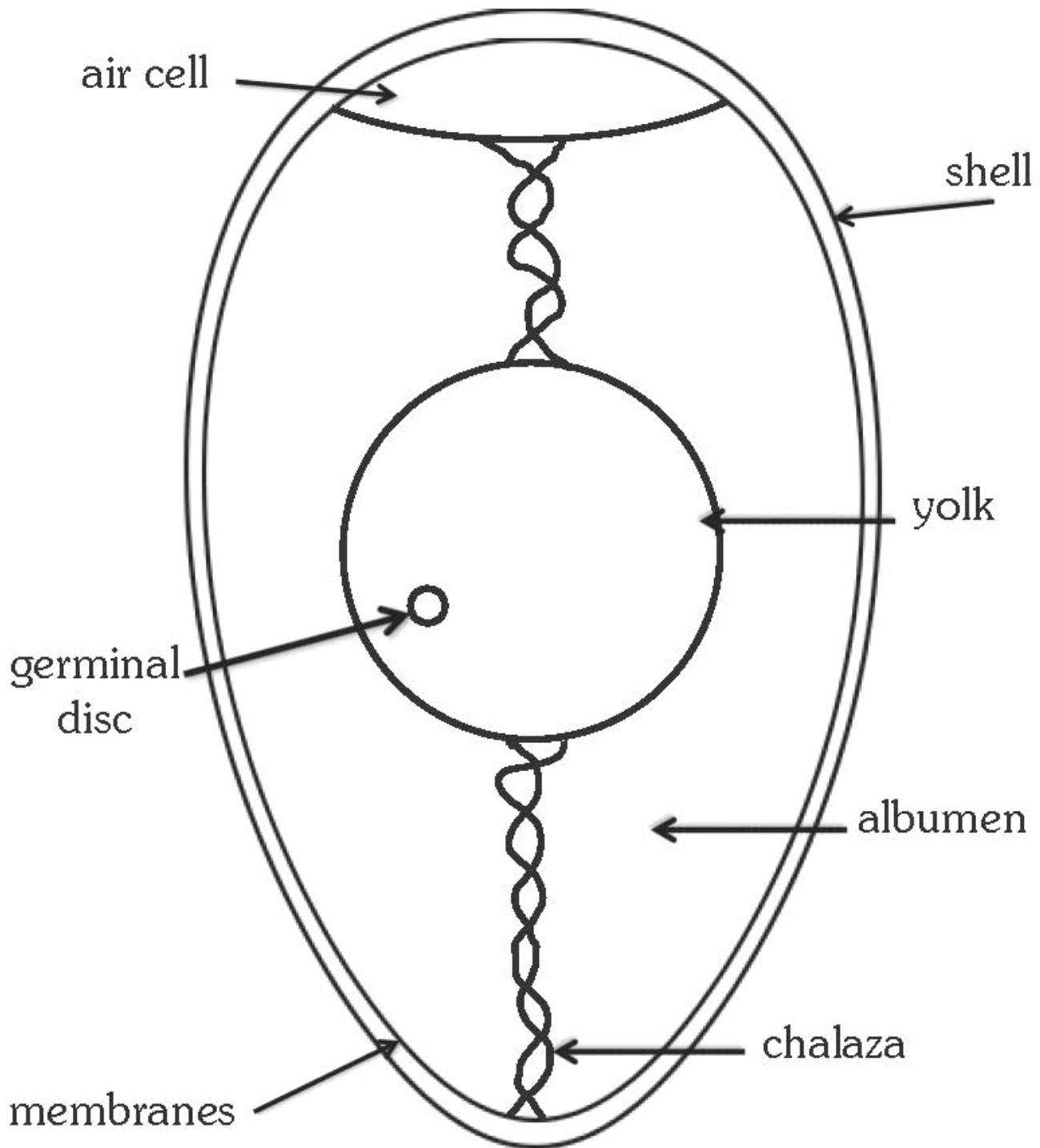
Similarities and Differences





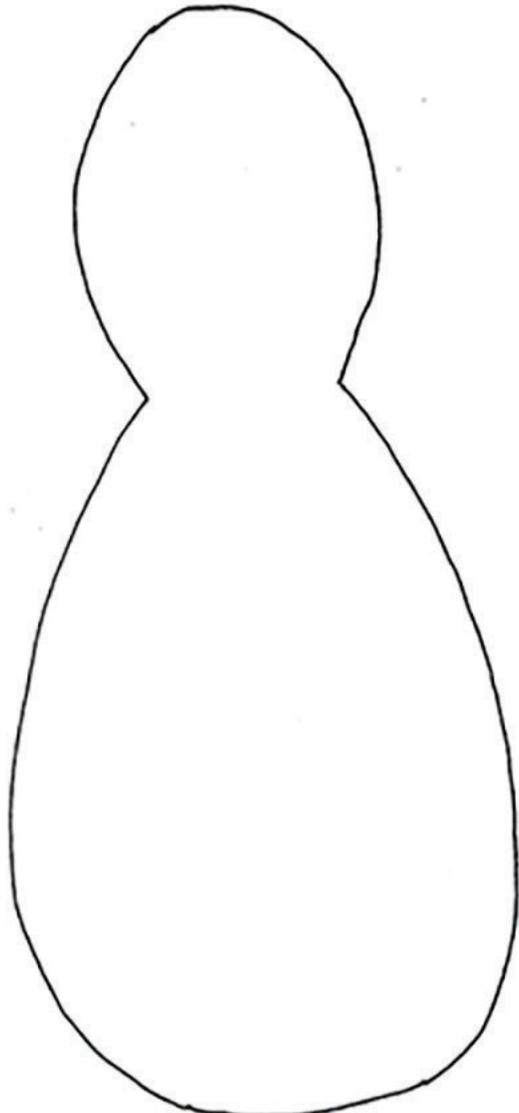
Chicken Life Cycle

Parts of an Egg Diagram

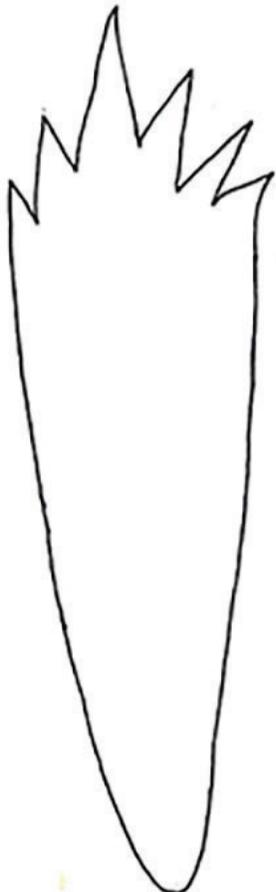


Thankful Turkeys Handout

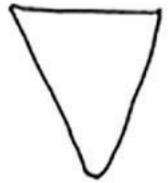
Body



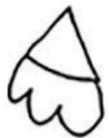
Feathers



Beak

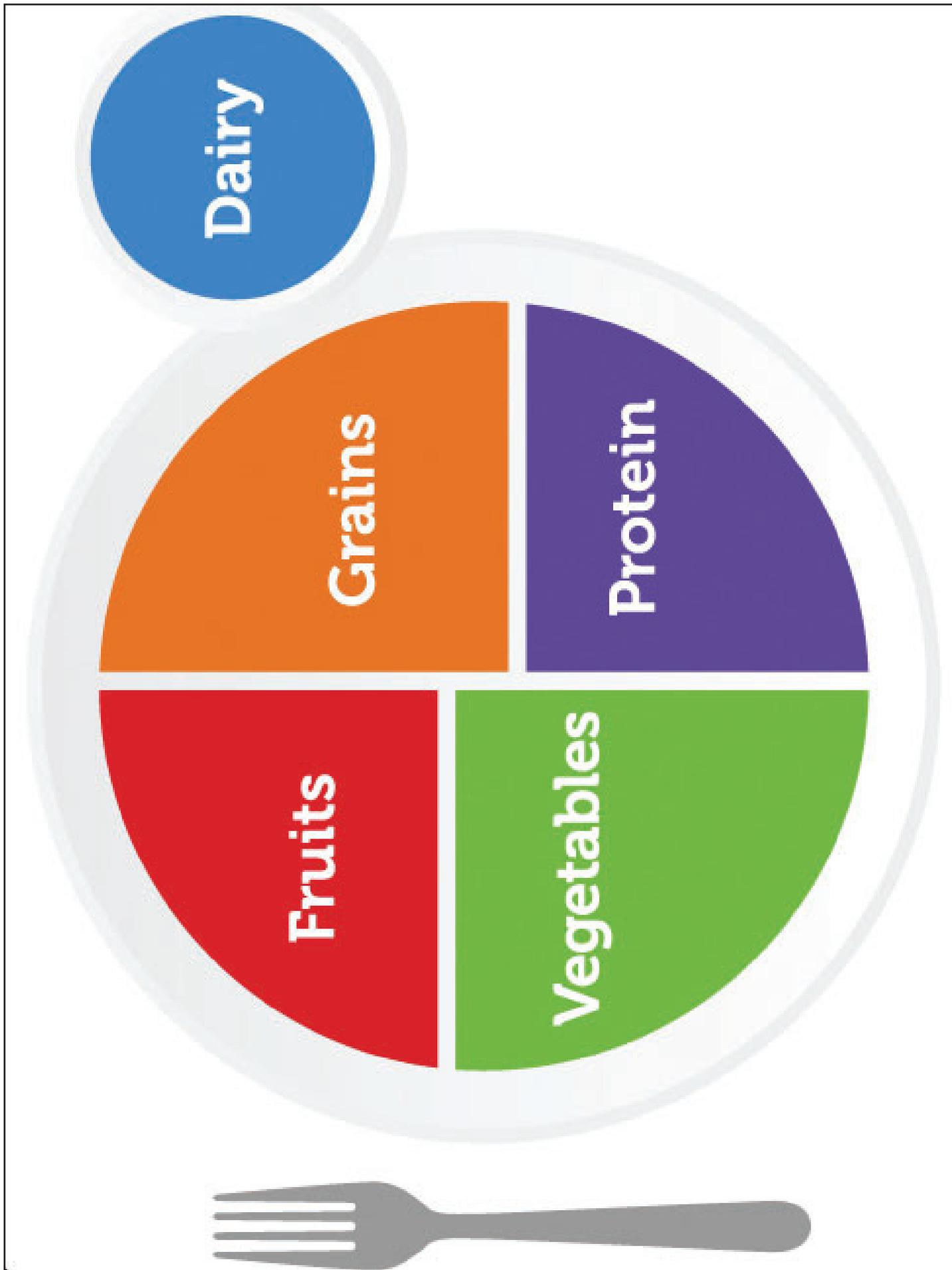


Wattle



Feet

MyPlate Place Mat



What's MyPlate All About?

