All Things Poultry

Illinois Ag in the Classroom
Table of Contents

Chickens Aren’t the Only Ones ........................................................................................................... 4

Describe Your Chicken.......................................................................................................................... 7

The Little Red Hen ............................................................................................................................... 9

Life Cycle of a Chicken........................................................................................................................ 10

Vinegar, Corn Syrup & Eggs! .............................................................................................................. 18

My Turkey Lapbook ........................................................................................................................... 19

A Poultry Taste Test ............................................................................................................................ 24

Will The Egg Break? ........................................................................................................................... 25

Eggs in the Classroom .......................................................................................................................... 26

Drawing & Labeling Chickens Using Shapes! ..................................................................................... 29
Chickens Aren’t the Only Ones

Grade Level: K-1

Purpose: Students will learn about oviparous animals and how different colored eggs can come from the same animal.

Common Core State Standards: CCSS.ELA-Literacy.SL.K.1; SL.K.2; W.K.2

Suggested Reading Materials:
IAITC’s Poultry Ag Mag
Chicken’s Aren’t the Only Ones by Ruth Heller ISBN-13: 9780698117785

Materials Needed:
• Chart paper with colored markers
• Paper, pencils and crayons
• Optional: Cooked eggs to have a taste test

Procedure:
1. Have the students join you at the carpet to begin the lesson.
2. For a higher level option, direct the students attention to the chart paper with the word Oviparous written on it. Tell the students that the word oviparous is an animal that hatches from an egg. Once they hear the definition, they will have some ideas of animals that hatch from an egg.
3. Have the students come up to the chart paper with a black marker, and write or draw a picture of animals they believe lay eggs. After they have documented their list, read the book Chickens Aren’t the Only Ones to the class.
4. Once the reading is complete, have the students add new information to their list. They will add pictures or words to the chart paper, with a different color marker, to show what they learned from listening to the book about oviparous animals.
5. Spend time, as a class, looking back through the pages at the unique eggs that come from the different animals found in the book Chickens Aren’t the Only Ones. Make sure to show the students page five to see real pictures of the unique eggs and the animal the eggs came from. Ask the students if these eggs look like the eggs we eat. Follow this with the question, “Which animal do the eggs we eat come from?”
6. Now that the students understand there are many oviparous animals that hatch from eggs, spend time discussing that there can be many different colored eggs that come from the same animal. There are many different breeds (kinds) of chickens that lay different colored eggs. For example: Leghorn Chickens lay white eggs, New Hampshire Red Chickens lay brown eggs, Ameraucana Chickens lay blue eggs and Olive Egger Chickens lay olive green eggs. According to the University of Illinois Extension, if hens have been fed the same type of ration, their eggs will be nutritionally equivalent, regardless of the shell color. They will have the same flavor and cooking characteristics as well.
7. Chicken eggs are important to us. Looking back to the first few pages of the book, Chickens Aren’t the Only Ones, explain that chickens lay the eggs we buy, boil, fry or even dye! Take time to look through the Poultry Ag Mag and the pictures found on page six to make sure the students understand what a real hen looks like and her eggs.
8. Page six shows four different breeds of chickens that lay different colored eggs. Have the students choose one chicken and, on a separate piece of paper, draw the egg that came from that chicken and color the egg either white, brown, blue or green. Underneath the egg, have the students write the name of the chicken that lays that color egg.

Lesson Extender:
1. Bring in hard boiled eggs, one brown and one white, to your class for a taste test and have the students decide for themselves if the color of the egg makes the egg taste any different.
Ostrich
* The largest egg

Image from: https://www.livescience.com

Image from: DudeFoods.com

Snake

Image from: https://srelherp.uga.edu

Image from: roadsendnaturalist.com

Shark

Image from: http://mentalfloss.com

Image from: www.treknature.com

Crocodile

Image from: https://youtu.be/Ss9GXZA5H0k

Image from: https://www.arkive.org
1. White Leghorn (white eggs)


https://www.moyerschicks.com

2. New Hampshire Red (brown eggs)

https://www.omlet.us/breeds/chickens/new_hampshire_red

http://nmcpoultry.com/new_hamshire.htm

3. Ameraucana (blue eggs)

https://www.flickr.com/photos/salpicado/5370872171/in/photostream/

https://sercadia.wordpress.com/tag/blue-chicken-eggs/

4. Olive Eggers (olive green eggs)


https://www.chasehatchery.com
Describe your Chicken

Grade Level: K-1

Purpose: Students will learn about chicks, hens and roosters during this lesson and understand they have many differences.

Common Core State Standards: CCSS.ELA-Literacy.RI.K.9; W.K.2; W.1.2

Suggested Reading Materials:
IAITC’s Poultry Ag Mag

Materials Needed:
• White construction paper
• Colored pencils, crayons or markers
• Scissors
• Glue or tape
• Pencils
• Template found on page 8

Procedure:
1. Hand out a Poultry Ag Mag to each student.
2. As a class look specifically at the vocabulary section, in the ag mag, focusing on the following terms: oviparous, chick, hen, and rooster. Review the term oviparous with the students. Explain the difference between a chick, hen and rooster to the class.
3. Read, Chickens by Rachael Bell. As a class, compare the book Chickens to the Poultry Ag Mag. Focus on the real pictures in both resources to show your students exactly what a chick, hen and rooster look like.
4. Each student will choose which type of chicken they would like to make. They can make a chick, hen or rooster.
5. Students will begin tracing each others hands to make the wings for their chicken.
6. On each finger, the students will write words to describe their chick, hen or rooster. A few questions you could provide your students with to answer can be found to the right.
7. Using the template that follows, students will color their chickens body brown, yellow or white depending on which chicken they decide to make. Allow time to color each part of their chicken before they cut any pieces out.
8. Students will cut out each part of their chicken from the template found on the following page. They will also cut out their handprints they traced earlier. Before gluing, show the students the example found above to give them an idea of what their chicken should look like.
9. Help students glue each part of the chicken to the chickens body to finish their hen, rooster or chick.
10. Display the chickens in your classroom or in the hallway with a list of the questions you asked your students to answer for their wings.

Sample questions to help students describe their chicken.

⇒ Are hens male or female? Female
⇒ How many toes do chickens have? Eight toes
⇒ How many days does a hen sit on her eggs? 21 days
⇒ I am smaller than a rooster, but bigger than a chick. Hen
⇒ I hatch after 21 days. Chick
⇒ Chicks are _____ or _____. Male or female
⇒ I say cheep. Chicks cheep
⇒ Chicks are ______. Soft
⇒ I am a male chicken. Rooster
⇒ Are roosters male or female? Male
⇒ Roosters have larger _____ and ______ than hens. Larger combs and wattles
⇒ Hens, Roosters and Chicks are all what? I am a chicken.
⇒ A rooster has colorful ________. Colorful feathers
⇒ Chicks have a special egg _____ on their beaks. Special egg tooth
⇒ What is the color of my beak? Orange beak
⇒ What is a baby chicken called? Chick
⇒ What do hens lay approximately six at a time of? I lay eggs.
⇒ Chickens have ______. Wings
The Little Red Helping Hens
Eggs, Eggs, Eggs
Need a basket!

Grade Level: K-2

Purpose: Students will understand where foods made with wheat and eggs, such as cake, come from. They will also begin to understand what acrostic poems are.

Common Core State Standards: CCSS.ELA.Literacy.W.K.2; W.1.2

Suggested Reading Materials:
IAITC’s Poultry and Wheat Ag Mag
Poultry Young Reader

Materials Needed:
- Adult volunteers
- Chart paper and markers
- Paper and pencils
- Optional: access to internet for www.getepic.com

Procedure:
1. Begin by reading The Little Red Hen by Heather Forest. Optional: Go to getepic.com and choose the “Read to Me” option.
2. Discuss the process the Little Red Hen went through from planting the wheat to having a delicious cake! Use the Wheat Ag Mag to show real pictures of a wheat kernel and wheat plant.
3. Have a sample of cake, made from wheat and eggs, for each student to try.
4. Spend time discussing why “The Little Red Hen” is a hen. What words can the class come up with that describes a hen? Consider looking to the Poultry Ag Mag and Poultry Young Reader to find more descriptive words about hens. Using chart paper, write the words the class came up with and those that were found in the provided resources. A few examples of descriptive words are; female, eggs, bird, two wings, wattle, etc.
5. From that list, with the help of an adult, the students will create an acrostic poem. An example using descriptive words can be found at the top of this page.
6. Discuss or review what an acrostic poem is and how they need to write their poem.
7. Once students have completed their poems, make sure to display their poems for everyone to see.

Lesson Extender:
1. As a class, write your own Little Red Hen story.
Life Cycle of a Chicken

Grade Level: K-1

Purpose: Students will understand the life cycle of a chicken through literature and a hands-on activity.

Common Core State Standards: CCSS.ELA-Literacy.RI.K.10; RI.1.10

Next Generation Science Standards: K-LS1-1

Suggested Reading Materials:
IAITC’s Poultry Ag Mag
From Egg to Chicken by Dr. Gerald Legg ISBN-13: 9780531153338

Materials Needed:
- Colored pencils
- Pencils
- Construction paper
- Scissors
- Glue
- Staplers
- Life cycle pictures found on page 12
- Templates found on pages 13-17

Procedure:
1. Chickens need food in order to live and grow. Read From Egg to Chicken to learn about what young chicks, still inside their egg, eat to continue growth. Once the chicks have hatched, the hen teaches her chicks how to feed. She pecks at food, then drops it for the chicks to eat. This is how chicks learn to peck. In this book, you will also see the entire lifecycle from egg to chicken.
2. To reinforce the concept of the lifecycle, the students will make their own chicken life cycle. Look on page 10 for an example to guide the students.

⇒ Step 1: Students will pair up and trace each others hands, twice, on white construction paper. Cut them out and set aside for later. Each student should have *four* handprints. On two of the four handprints, cut one of the four “toes” in half. This forth toe represents the accessory toe on a chicken which is much smaller than the other three toes.

⇒ Step 2: Using the templates, found on pages 13-17, have the students cut out each part.

⇒ Step 3: Each piece is labeled with a number. Have the students put the numbers in order placing each section behind number one until you have number five in place. At the top, in the center, staple the five pieces together to create the book. Make sure to trim the edges on pages 1-4 to match the oval shape from page 5.

⇒ Step 4: Glue the handprints on each side of the chicks body and the feet to the bottom. Only *four* of the child's fingers should be showing on the wings and the feet.

⇒ Step 5: At the top of page 1, draw the eyes and beak on with colored pencils to complete the chick.

⇒ Step 6: Now that the chick is put together, the students will write each step to the lifecycle on the pages of the book they created.

⇒ Page 1: The Life Cycle of a Chicken

⇒ Page 2: Egg

⇒ Page 3: Hatchling

⇒ Page 4: Chick

⇒ Page 5: Adult Chicken

3. Students will use real pictures, found on page 12 to glue to pages 2-5 and write one sentence about the egg, hatchling, chick and adult chicken. For example:

⇒ Egg: A chicken begins life as an egg.

⇒ Hatchling: A hatchling is a newly hatched chick.

⇒ Chick: The hatchling dries out and becomes a fluffy yellow chick.

⇒ Adult Chicken: After a few months, the chick will become an adult hen or a rooster.

4. The students have now created their own life cycle of a chicken.
Photo taken by Illinois Farm Bureau photographer

https://countrysidenetwork.com

https://www.hobbyfarms.com

https://www.purelypoultry.com
Vinegar, Corn Syrup and Eggs!

Grade Level: K-2

Purpose: Students will get an inside look into a raw egg after dissolving the shell off. They will also experiment with different liquids to see the different outcomes.

Common Core State Standards: CCSS.ELA-Literacy.RI.K.10; RI.1.10; RI.2.3; RI.2.10, W.K.2; W.1.2; W.2.2
CCSS.Math.Content.2.MD.A.1

Next Generation Science Standards: 2-PS1-1

Suggested Reading Materials: IAITC’s Poultry Ag Mag

Materials Needed:
- Distilled white vinegar
- Raw eggs
- Tall glass jars
- Corn syrup
- Paper towels
- Adult volunteer
- Water

Procedure:
1. Divide your class in groups of four, with an adult volunteer, to conduct this experiment. Give each group the following: two eggs, two tall glass jars, distilled white vinegar, corn syrup and paper towels.
2. Each group will start by placing one egg, very carefully, in each glass jar. They will add enough vinegar to both jars to cover the eggs.
3. Very quickly the students will notice tiny bubbles forming on the shell of their eggs. Explain to the students that the bubbles are carbon dioxide gas forming because the reaction between vinegar (which is acidic) and the (calcium carbonate) egg shell cause this to happen.
4. Leave the eggs in the vinegar for a full 24 hours. You could keep some eggs out at room temperature and put some in the refrigerator to conduct a small experiment too!
5. On the second day, change the vinegar by carefully pouring the old vinegar down the drain and covering the one egg, per group, with fresh vinegar. Place the glass in a safe place for seven days, making sure to observe them every day to record anything that may change over the week. Cover the second egg with corn syrup and place that jar in a safe place as well. Make sure to label which egg is soaking in the vinegar and which egg is soaking in the corn syrup.
6. On day seven, pour off the vinegar and carefully rinse the eggs with water.
7. Conclusion:
   ⇒ Vinegar Egg: The only thing that remains is the delicate membrane of the egg that surrounds the white and the yolk.
   ⇒ Corn Syrup Egg: The egg “went flat”. Corn syrup has a very low concentration of water so some of the water from inside the egg travels through the membrane into the corn syrup, making the egg cell shrink. Try placing the egg back in water for another day. It will plump right back up as the water travels back into the egg!
8. Make sure the students are keeping an observation journal throughout the seven day experiment. Depending the grade you are teaching, students can draw pictures and dictate to an adult what they are observing or write short sentences to explain what they see.

Lesson Extender: After allowing the egg to soak in vinegar for 24 hours, pour the vinegar out and take the egg out of the glass. Try dropping the egg into the sink from different heights. See how many inches high you can drop the egg from before the egg splats! Your egg should bounce when it is dropped into the sink.

Adapted from Steve Spangler Science
My Turkey Lapbook

Grade Level: K-3

Purpose: Students will understand the lifecycle, main parts and facts about domesticated turkeys.

Common Core State Standards: CCSS.ELA-Literacy.RI.1.9; W.K.2; SL.K.5; SL.1.5; W.2.6

Next Generation Science Standards: K.LS1-1

Suggested Reading Materials:
IAITC’s Poultry Ag Mag
IAITC’s Poultry Young Reader Fact Sheet
Turkeys by Hollie Endres ISBN-13: 9781600140860

Materials Needed:
• IAITC’s Poultry Ag Mag found at www.agintheclassroom.org
• IAITC’s Poultry Young Reader Fact Sheet found at www.agintheclassroom.org
• Colored file folder, one per student
• Crayons, colored pencils, markers, tape, glue sticks, staplers, hole punches, scissors, stickers, etc.
• Additional resources found on pages 20-23
• Adult volunteers or an upper elementary class to work one on one with the students
• Optional: Access to www.getepic.com for the “read to me” option of the turkey books listed

Procedure:
1. Begin by reading Turkeys by Hollie Endres and Turkeys by Wendy Dieker. Wendy Dieker’s book explains the parts of a turkey and has a picture glossary. There are real pictures throughout the book that will be helpful when discussing the parts and terms with the students.
2. Provide students with a Poultry Ag Mag, Poultry Young Reader Fact Sheet and the resources found on pages 20-23. Note: You can customize the lapbook by adding or changing parts of your lapbook to suit your students’ level. Give students time to begin planning their lapbook. Adult volunteers or an upper elementary class will be needed to guide the students through the planning process.
3. The students’ lapbook will be a visual representation of interesting facts, the lifecycle of a turkey and the main parts of a turkey. Follow the steps below to make the lapbook base. Students may need assistance while making their lapbook base.
   - Step 1: Open the file folder, horizontally, and lay it flat on the desk in front of you.
   - Step 2: Fold each side in to where the original crease was.
   - Step 3: Use the colored paper to make mini books to add information to your lapbook.
   - Step 4: Look at the example to the right to see an example of a finished lapbook.
4. Once the base is completed, each student will work with the volunteers to add the information from the resources provided to their lapbook. Make sure the students are being creative by using the crayons, glue, stickers, etc.
5. Each child will present their lapbook to their classmates with their adult/student volunteer.
Life Cycle of a Turkey

Directions: First, cut out each piece and put the life cycle together in the correct order. Glue the completed turkey lifecycle to your lapbook.

Life Cycle: Turkey Eggs, Poult, Young Turkey, Adult Turkey

https://hamiltonfarm.wordpress.com

https://www.eastcountyzoo.com

https://www.eastcountyzoo.com

https://www.eastcountyzoo.com
Cut out the words below. Match the words to the correct part of the turkey. Have your teacher check your work. Then, glue the words to the turkey.

<table>
<thead>
<tr>
<th>Feathers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wings</td>
</tr>
<tr>
<td>Beak</td>
</tr>
<tr>
<td>Head</td>
</tr>
<tr>
<td>Feet</td>
</tr>
<tr>
<td>Eyes</td>
</tr>
<tr>
<td>Wattle</td>
</tr>
</tbody>
</table>
Cut out the turkey picture and glue it in your lapbook.
Turkey Facts

Turkeys have a hard, sharp beak. It helps them to pick up small foods such as grains.

Male turkeys are called Toms, while female turkeys are called Hens.

Wild turkeys can fly. Most domesticated ones cannot because they are too heavy.

Turkeys have eyes on the side of their head. They cannot see things right in front of them.
A Poultry Taste Test

Grade Level: K-4

Purpose: Students will learn more about food products that come from turkeys and chickens while taste testing those foods and graphing which foods are liked the most by their peers.

Common Core State Standards: CCSS.ELA.Literacy.RI.K.10; RI.1.10; W.K.2; SL.K.1; SL.K.5  
CCSS.Math.Content.1.OA.A.1; 1.MD.C.4

Next Generation Science Standards: K-LS1-1, 3-LS1-1

Suggested Reading Materials:
IAITC’s Nutrition and Poultry Ag Mag

Materials Needed:
- Dinner sized paper plates, napkins, forks
- Poultry foods to taste: For example, fried chicken, rotisserie chicken lunch meat, cooked turkey, oven roasted turkey breast lunch meat, hardboiled eggs, scrambled eggs
- Chart paper and markers
- Volunteers

Procedure:
1. Spend time, as a class, looking through IAITC’s Poultry Ag Mag to learn more about the main food products we get from chickens and turkeys.
2. For an extra challenge, read through the Nutrition Ag Mag focusing on the “Go Lean With Protein” section. Discuss why poultry and eggs are important to our diet.
3. Split the class evenly into three groups. There will be three stations for the groups to rotate through throughout this lesson. Be sure to have an adult assisting the students at each station.
4. Station 1: Have the volunteer read the book Chickens by Rachael Bell and have the volunteer ask questions about the book. For example: How are chickens used? Chickens are raised for the eggs they lay and the meat they provide. How many eggs does a hen lay at a time? Approximately six. Once they have completed the discussion, have each student taste test chicken. Have at least two choices of chicken for the students to try. For example, fried chicken and rotisserie chicken lunch meat.
5. Station 2: Have the volunteer read Turkeys by Rachael Bell and have the volunteer ask the students questions about the book. For example: What are turkeys raised for? Turkeys are raised for the eggs they lay and the meat they provide. Students will taste test two different kinds of turkey products at this station. For example, cooked turkey and oven roasted turkey breast lunch meat.
6. Station 3: Students will come to this station to learn about where eggs come from. They will taste test hard boiled eggs and scrambled eggs. End this station by reading Eggs by Louise Spilsbury to learn what eggs are, what is inside the egg and why they are so good for you and your diet. Ask the students some of the different ways eggs can be cooked. Boil, scramble, fry, etc. What do eggs contain that make them healthy for you? Protein and vitamins.
7. Have all students come to the carpet to discuss the poultry foods they just taste tested! As a class, make a graph of each food they tasted. Have a graph ready so the students can come up and fill in the food they enjoyed the most with a marker. Spend time talking about which food the majority of the class liked the most and ask them why. Try adding in simple math with the graph. For example, have the students subtract the number of total students by the number of students that liked hardboiled eggs, etc.
8. With an adults help, have the students draw a picture of the animal the food they enjoyed most came from and write a sentence about the food they chose and why.
Will The Egg Break?

Grade Level: K-2

Purpose: Students will understand why you can squeeze or walk on eggs without them breaking. They will understand the strength of an eggshell if the weight of the hen or person is evenly distributed.

Common Core State Standards: CCSS.ELA-Literacy.SL.K.1; RL.K.1; RL.K.10

Next Generation Science Standards: K-PS2-1; 2-PS1-1

Suggested Reading Materials: IAITC’s Poultry Ag Mag
The Chicken-Chasing Queen of Lamar County by Janice N. Harrington ISBN-13: 9780374312510

Materials Needed:
- Large–sized eggs
- Plastic trash bags
- Soap, paper towels, warm water, tub
- Classroom items for students to experiment with
- Optional: Go to agintheclassroom.org to see a video of a person walking on eggs!

Procedure:
1. Start the lesson by reading The Chicken-Chasing Queen of Lamar County and discuss what the chicken-chasing queen finds when she finally finds Miss Hen. She finds Miss Hen with three baby chicks already hatched and the hen protecting them beneath her wing. Discuss that hens sit on their eggs to keep them warm and are very protective of their eggs. A hen can sit on her eggs and not crush them (her weight is evenly distributed over the eggs) while a tiny chick can peck its way out of an eggshell with its egg tooth (the chick applies uneven pressure at just one spot of the eggshell).
2. Explain to the students they are going to try an experiment to see just how sturdy eggs truly are. Start by placing a raw, nonfertilized, egg in the palm of each students hand. Note: Make sure the students are not wearing any rings for this experiment. Tell the students to close their hand so that their fingers are completely wrapped around the egg. The students will squeeze the egg by applying even pressure all around the shell. The egg should not break. If you think that was fun, let’s try walking on eggs!
3. Make sure the students are barefoot and the eggs in each carton are positioned in the same way (either all pointy side up or all pointy side down). This gives your feet a more level surface to stand on.
4. Spread the plastic trash bag on the floor and place the two cartons of eggs in front of the student.
5. Holding someone’s hand, they will step up onto the first carton and make sure their foot is as flat as possible so their weight is evenly distributed across the eggs. They will follow the same step with their other foot.
6. Remember, if they do happen to crack an egg, make sure they wash their foot with soap and water!
7. Discuss why you can squeeze an egg and walk on eggs without them breaking.
   ⇒ Eggs have an arched shape at each end. When you stand on the eggs, your weight is evenly distributed over the eggs instead of concentrated on one single point. This keeps the eggs from cracking under the pressure! The egg carton design also helps to keep the eggs from cracking. Egg cartons are made of sturdy cardboard or polystyrene plastic. The individual divots not only support each egg but also keep the eggs from knocking into each other when they are transported.
8. Let students experiment with the eggs by trying to stack different items, they can find around the classroom, on the carton of eggs. Let them think of other ways without giving them any clues. Consider some of the ideas below:
   ⇒ Stack books on top of one carton of eggs, how many books can you stack on the eggs without the eggs breaking?
   ⇒ Place a box on top of the eggs and add items from around the classroom to the box.
   ⇒ Have a student hold another student on their back and carefully step on the eggs!

Adapted from Steve Spangler Science
Eggs in the Classroom, with a flashlight!

Grade Level: K-1

Purpose: Students will observe embryo development in chicken eggs by candling eggs at different stages.

Common Core State Standards: CCSS.ELA-Literacy.RI.K.10; SL.K.1; SL.K.2

Next Generation Science Standards: K-LS1-1; 1-PS4-2

Suggested Reading Materials:
IAITC’s Poultry Ag Mag
Hatching Chicks in Room 6 by Caroline Arnold ISBN-13: 9781580897358
From Egg to Chicken by Gerald Scrace Legg ISBN-13: 9780531153338

Materials Needed:
*Contact your County Ag Literacy Coordinator to see if your county has the following materials to borrow. For a list of County Coordinators, go to agintheclassroom.org.

- Modeling clay
- 1 high-intensity LED flashlight
- Fertilized chicken eggs
- Incubator
- Thermometer
- Egg turner
- Hygrometer

Vocabulary:
Embryology: The science that explains growth and development of an embryo.
Incubator: A machine that creates the perfect conditions for an egg to incubate and hatch successfully. An egg incubator keeps the temperature and humidity at perfect levels.
Candler: A device used for testing eggs.

Adapted from Utah Ag in the Classroom
Procedure:

1. Start by reading Hatching Chicks in Room 6 by Caroline Arnold to introduce the three week activity of hatching chicks in the classroom. This book has great pictures and information to help the students understand the process of hatching chicks.

2. Set up the incubator and carefully place your eggs inside and follow all instructions provided with the incubator or your county coordinator. The candling process will begin as early as day 4, so be ready!

3. Eggs with white shells can be candled around the fourth day of the incubation cycle. Be sure to candle the eggs again on day 12 to observe the differences from day 4 to day 12. Dark-shelled eggs may be difficult to see through and will give better results after about a week. Dirt on the shells can be brushed away. Do not wash the eggs with water to prevent destroying the protective coating.

4. An effective candler can be made using a high-intensity LED flashlight and modeling clay. Wrap the clay around the top of the flashlight to create a nest for the egg. The clay will seal between the flashlight and the egg and will focus the light through the egg. Look at the example above to see what your candler should look like.

5. Carefully hold an egg's wide end in the center of the opening directly over the beam of light. You may need to dim or turn off any outside lighting to candle the eggs. Remember to be careful with the eggs, small cracks can cause the egg not to hatch.

6. In a fertile egg, there will be veins running out from a dark center. Eggs with no visible embryonic development are infertile, while an egg with a few small blood spots is a fertilized egg in which the embryo has died.

7. Talk to your students about what needs to be done in order to hatch the chicks on day 21. For example, put water in the incubator, watch the temperature in the incubator and rotate the eggs.

8. Once the chicks have hatched, talk to the students about the needs of the baby chicks such as, provide clean water, food and keep the chickens warm.

Adapted from Utah Ag in the Classroom
“Chicks in the Classroom”
Reach out to the county contacts below for questions about hatching chicks in the classroom or go to agintheclassroom.org to find your county coordinator.

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>FIRST NAME</th>
<th>LAST NAME</th>
<th>PHONE NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carroll</td>
<td>Melinda</td>
<td>Charbonneau</td>
<td>815-732-2191</td>
</tr>
<tr>
<td>Cass-Morgan</td>
<td>Lisa</td>
<td>Hadden</td>
<td>217-473-4222</td>
</tr>
<tr>
<td>Champaign</td>
<td>Sarah</td>
<td>Kaper</td>
<td>217-352-5235</td>
</tr>
<tr>
<td>Christian</td>
<td>Rebecca</td>
<td>Livingston</td>
<td>217-287-7246</td>
</tr>
<tr>
<td>Clark</td>
<td>Megan</td>
<td>Grissom</td>
<td>217-824-4144</td>
</tr>
<tr>
<td>Clay</td>
<td>Larissa</td>
<td>Goodman</td>
<td>618-665-3345</td>
</tr>
<tr>
<td>Cook</td>
<td>Diane</td>
<td>Merrion</td>
<td>708-354-3276</td>
</tr>
<tr>
<td>Cumberland</td>
<td>Kristi</td>
<td>Shirley</td>
<td>217-849-3031</td>
</tr>
<tr>
<td>DeKalb</td>
<td>Rhodora</td>
<td>Collins</td>
<td>815-756-6361</td>
</tr>
<tr>
<td>Douglas</td>
<td>Ericka</td>
<td>Crist</td>
<td>217-253-4442</td>
</tr>
<tr>
<td>Effingham</td>
<td>Lisa</td>
<td>Zumbahlen</td>
<td>217-821-7241</td>
</tr>
<tr>
<td>Fayette</td>
<td>Martha</td>
<td>Cripe</td>
<td>618-283-3276</td>
</tr>
<tr>
<td>Ford-Iroquois</td>
<td>Jennifer</td>
<td>Odle</td>
<td>815-268-4051</td>
</tr>
<tr>
<td>Franklin</td>
<td>Melissa</td>
<td>LAMCZYK</td>
<td>618-435-3616</td>
</tr>
<tr>
<td>Fulton</td>
<td>Jamie</td>
<td>Butler</td>
<td>309-547-3011</td>
</tr>
<tr>
<td>Grundy</td>
<td>Ann</td>
<td>Collet</td>
<td>815-942-6418</td>
</tr>
<tr>
<td>Hamilton</td>
<td>Leslie</td>
<td>Kueker</td>
<td>618-643-2397</td>
</tr>
<tr>
<td>Hancock</td>
<td>Dawn</td>
<td>Weinberg</td>
<td>217-357-2150</td>
</tr>
<tr>
<td>Henry</td>
<td>Paula</td>
<td>Janson</td>
<td>309-937-2411</td>
</tr>
<tr>
<td>Jasper</td>
<td>Lindsey</td>
<td>Vogt</td>
<td>618-783-2733</td>
</tr>
<tr>
<td>Kane</td>
<td>Suzi</td>
<td>Myers</td>
<td>630-584-8660</td>
</tr>
<tr>
<td>Kankakee</td>
<td>Lisa</td>
<td>Habeeb</td>
<td>815-932-7471</td>
</tr>
<tr>
<td>Knox</td>
<td>Mary Beth</td>
<td>Bowman</td>
<td>309-342-2036</td>
</tr>
<tr>
<td>Lake</td>
<td>Andy</td>
<td>Blaul</td>
<td>847-223-6506</td>
</tr>
<tr>
<td>Lawrence</td>
<td>Amy</td>
<td>Buchanan</td>
<td>618-943-2610</td>
</tr>
<tr>
<td>Lee</td>
<td>Katie</td>
<td>Pratt</td>
<td>815-857-3531</td>
</tr>
<tr>
<td>Logan</td>
<td>Amy</td>
<td>Hyde</td>
<td>217-732-8289</td>
</tr>
<tr>
<td>Macoupin</td>
<td>Connie</td>
<td>Niemann</td>
<td>217-854-9604</td>
</tr>
<tr>
<td>Madison</td>
<td>Chelsea</td>
<td>Reeves</td>
<td>618-692-6575</td>
</tr>
<tr>
<td>Marion</td>
<td>Meggan</td>
<td>Hiestand</td>
<td>618-548-2100</td>
</tr>
<tr>
<td>Marshall-Putnam</td>
<td>Julie</td>
<td>Read</td>
<td>309-364-2356</td>
</tr>
<tr>
<td>Massac</td>
<td>Jessica</td>
<td>Bowman</td>
<td>618-524-5811</td>
</tr>
<tr>
<td>Mercer</td>
<td>Teresa</td>
<td>Kirwan</td>
<td>309-582-5106</td>
</tr>
<tr>
<td>Montgomery</td>
<td>Beth</td>
<td>Groves</td>
<td>217-532-3941</td>
</tr>
<tr>
<td>Ogle</td>
<td>Melinda</td>
<td>Charbonneau</td>
<td>815-732-2191</td>
</tr>
<tr>
<td>Perry</td>
<td>Nancy</td>
<td>Timpner</td>
<td>618-357-3217</td>
</tr>
<tr>
<td>Piatt</td>
<td>Kristin</td>
<td>Pyatt</td>
<td>217-762-2128</td>
</tr>
<tr>
<td>Pike/Scott</td>
<td>Rachel</td>
<td>Smith</td>
<td>217-285-2233</td>
</tr>
<tr>
<td>Pope-Hardin</td>
<td>Lora</td>
<td>Jacobs</td>
<td>618-683-3651</td>
</tr>
<tr>
<td>Randolph</td>
<td>Brandi</td>
<td>DeRousse</td>
<td>618-443-4511</td>
</tr>
<tr>
<td>Richland</td>
<td>Donna</td>
<td>Zwilling</td>
<td>618-393-4116</td>
</tr>
<tr>
<td>Rock Island</td>
<td>Sheryl</td>
<td>Solomonson</td>
<td>309-736-7432</td>
</tr>
<tr>
<td>Saline</td>
<td>Maridy</td>
<td>Tso</td>
<td>618-252-6992</td>
</tr>
<tr>
<td>Sangamon</td>
<td>Carrie</td>
<td>Winkelmann</td>
<td>217-753-4611</td>
</tr>
<tr>
<td>Shelby</td>
<td>Kathleen</td>
<td>Agney</td>
<td>217-774-2151</td>
</tr>
<tr>
<td>Stark</td>
<td>Anna</td>
<td>Emm</td>
<td>309-286-7481</td>
</tr>
<tr>
<td>Union</td>
<td>Andrew</td>
<td>Banks</td>
<td>618-303-1034</td>
</tr>
<tr>
<td>Vermilion</td>
<td>Kammie</td>
<td>Richter</td>
<td>217-442-8713</td>
</tr>
<tr>
<td>Washington</td>
<td>Kerri</td>
<td>Krawiecki</td>
<td>618-327-3081</td>
</tr>
<tr>
<td>Wayne</td>
<td>Ryan</td>
<td>Scott</td>
<td>618-842-3342</td>
</tr>
<tr>
<td>White</td>
<td>Ryan</td>
<td>Scott</td>
<td>618-382-8512</td>
</tr>
<tr>
<td>Will</td>
<td>Terri</td>
<td>Cooke</td>
<td>815-727-4811</td>
</tr>
<tr>
<td>Williamson</td>
<td>Annamaria</td>
<td>Farris</td>
<td>618-694-9893</td>
</tr>
<tr>
<td>Winnebago-Boone</td>
<td>Diane</td>
<td>Cleland</td>
<td>815-962-0653 x11</td>
</tr>
</tbody>
</table>
Drawing & Labeling Chickens Using Shapes!

Grade Level: K-2

Purpose: Students will identify the different parts of a chicken and draw a chicken using different shapes.


Suggested Reading Materials:
IAITC’s Poultry Ag Mag

Materials Needed:
• Optional: Access to internet to use the website Epic! www.getepic.com
• Template found on page 30
• Scissors
• Glue
• Crayons, colored pencils or markers
• Painters tape
• A large cube to draw the four shapes

Procedure:
1. You can start the lesson by either going to the website www.getepic.com (which is a free website for teachers and librarians), or reading a hard copy of Chickens by Cari Meister.
2. If using the website Epic, search for the book Chickens by Cari Meister. This book is one of many options you can use when teaching about chickens. Chickens is a “Read To Me” option, shows many vocabulary terms, and the parts of a chicken are labeled and explained for the students to understand.
3. Read the book to the class, or use the website and choose the “Read To Me” option. After the reading is finished, discuss the book together focusing on the importance of the parts of a chicken. For example, the wattle helps cool a chicken, the beak is used to peck the ground to find food, etc. Students will be making their own chicken using shapes and then labeling each part of the chicken. But first, take time to review the shapes that the students will be using to make their chicken.
4. It is time to play the game! With painters tape, make the following shapes on the floor; oval, circle, triangle and rectangle. Have each student take a turn rolling the cube and hop to the corresponding shape. Tip: Make at least three stations of shapes and cubes so more than one student can be hopping on shapes at a time! Once the students finish the game and feel comfortable with the four shapes, move them back to their seats to start making their chickens.
5. Start by asking the students to find the triangles, on page 30, by placing their fingers on both of them. Once you are sure the students have identified the triangles correctly, have them cut the triangles out. Continue this step with the ovals, circle, and rectangles. Show students the example above of a chicken created using only the shapes they cut out.
6. Make sure students use all of the circles, triangles, rectangles, and ovals when putting their chicken together. Once the chicken is completed, students will label each part of the chicken. The students may need assistance with this step. For example, the chickens head is a circle, the beak is a triangle, the wattle is oval, the shank is rectangle, etc.
7. Students can color their chicken when they have finished labeling each part of the chicken.
Using all of the shapes below, make a chicken similar to the example given on page 29. After your teacher has checked your work, glue the parts together to complete your chicken. Next, using the words below, label your chicken with the word that correctly identifies each chicken part. Color your chicken.

**Parts of the Chicken**

- Beak: triangle
- Body: oval
- Comb: ovals
- Eye: oval
- Head: circle
- Shank: rectangles
- Tail: triangle
- Toes: ovals
- Wattle: oval
- Wing: oval
Illinois Agriculture in the Classroom

1701 Towanda Ave.
Bloomington, IL  61701
Phone:  309-557-3334

Illinois Agriculture in the Classroom Ag Mags are four-page colorful agricultural magazines for kids. They contain information about agriculture, classroom activities, career interviews and bright pictures.