

A Chick Hatches

Standards of Learning

Science: K.7, K.9, 2.4

Objective

Students will:

- Identify the changes a chicken undergoes as it develops inside the egg

Materials

- 7 plastic eggs per student or group
- “A Chick Hatches” cards, attached
- Sharpies

Background Knowledge

Chickens are essential to the agriculture industry in that Americans consume its meat more than any other meat-producing animal. Whether chickens are raised on large farms inside of chicken houses or small farms as free range chickens their history with humans has been one of a large food source priced less expensive to produce and purchase compared to pork and beef.

Chickens ability to produce both meat and eggs make them more diversified than other farm animals. Broiler chickens, those that are bred for their meat, are Virginia’s top agricultural commodity.

The life cycle of a chick begins in an egg. Eggs that are produced for eating are not fertilized and will never form into a chick. Eggs that have been fertilized have the potential of developing into a chick if the environment is correct. Eggs can be hatched in an incubator or by a hen. If the process takes place naturally, the hen will lay a clutch of 8-13 eggs, by laying one per day for 1-2 weeks. Once she starts laying on the eggs or brooding it takes 21 days for the chick to develop and be ready to hatch. The mother hen keeps the eggs warm and only leaves the nest briefly to feed. The hen also turns the eggs several times per day to keep the embryo from sticking to one side of the shell. The same process can take place in an incubator. The eggs are maintained at the proper heat and humidity levels and turned every few hours for the duration of the 21 days until they hatch.

Once the chick has hatched and dried, it will be covered in a soft, fuzzy down. Within a few weeks as the chick grows, it will develop it's adult feathers. In 4-6 months the chicken will be fully grown. Hens will begin producing eggs around 5-6 months of age and the cycle can begin again. Common breeds of chickens used for meat in the broiler industry grow very quickly. They can grow from hatch to harvest in as little as 8-12 weeks!

Procedure

1. Review the steps in the chicken’s life cycle. Suggested books include:
A Chicken’s Life by Nancy Dickmann
Down on the Farm: Chickens by Hannah Roy
or share the “Hatching Science” PowerPoint
2. Give each student or group a set of 7 eggs and “A Chick Hatches” template. Instruct students to number the eggs 1, 4, 6, 12, 16, 19, and 21. They may do this with a Sharpie marker or you may choose to give them sticker dots with the numbers pre-written on them to attach. Optional, they may color the template.
3. Next, students will cut out the template cards and place inside the appropriately labeled eggs.
4. On the designated days, have students open that day’s egg and discuss the changes



For more resources to connect children to agriculture visit AgInTheClass.org.

they observe to the chick.

Credit

Background Knowledge and template courtesy of North Carolina Farm Bureau Agriculture in the Classroom



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A Chick Hatches

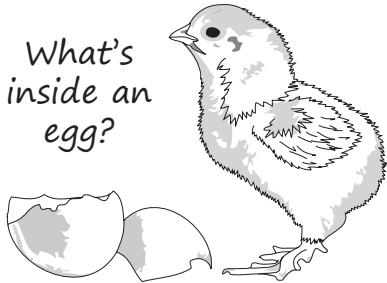
Color the pictures. Use scissors to cut on the dotted lines then place into the correctly labeled eggs.



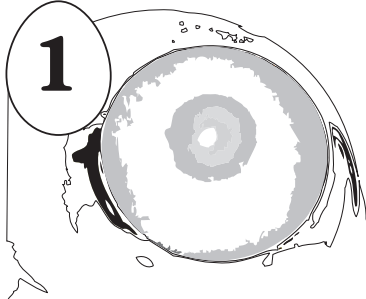
Cut here

A Chick Hatches

What's inside an egg?



1



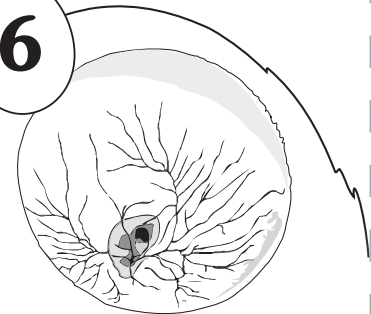
A baby chick begins as a small white patch within the yellow yolk.

4



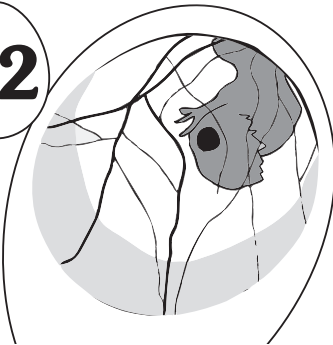
Can you see the chicken's head and heart?

6



Now there are two wings, two legs, and a beak!

12



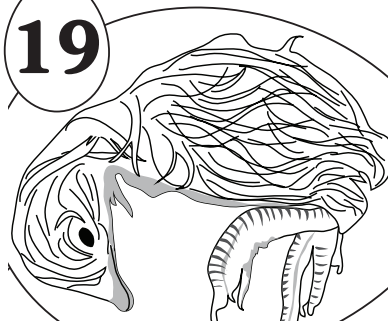
Wow! The baby chick has feathers and claws on its toes.

16



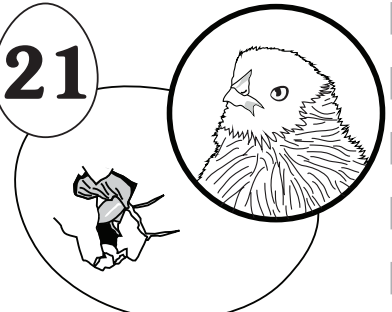
The baby chick will be born soon because it is getting too big and running out of food.

19



The chick begins to hatch when it breaks into its air cell and takes its first breath.

21



The chick uses its egg tooth to help break out of the egg. The wet chick will soon dry and have fluffy soft feathers.