



Dear Saunders County Educators,

Want to have a hands-on fun learning experience for your students? Try our **embryology school enrichment program** for your classroom(s). Cost is free to your classroom(s)!



**The program is offered March – May AND September – November.** It can be taught in person by extension staff, virtually or a kit dropped off at your school to teach on your own.

This program teaches students how life develops through the process of hatching baby chicks over a three-week period. Eggs are set on Tuesday or Wednesday and are candled 1-week later Tuesday or Wednesday. The chicks hatch on day 21; incubators and chicks are collected the week of hatch. Students will take responsibility for caring for the fertilized eggs during the 21-day incubation and the baby chicks after they hatch (for a few days).

**Objectives: State Education Standards:** SC.3.9.3, SC.4.6.3, L.A. 3.1.5, L.A. 4.1.5, and L.A. 5.1.5, L.A. 3.2.1, L.A. 4.2.1, and L.A. 5.2.1, M.A. 3.4.1, M.A. 4.4.1, and M.A. 5.4.2.

1. Explain the life cycle of a chicken.
2. Observe and understand embryo development.
3. Describe the process involved in a growing chicken embryo as it directly relates to the different parts of an egg, the proper elements needed to grow and hatch, and the various natural developments that occur.
4. Recognize that all animals start off with a similar process during the beginning stages of life.
5. Develop an appreciation of the miracle of life, with eggs and all forms of life.



We will provide the following materials and services:

1. 1 dozen fertilized eggs per 3<sup>rd</sup> grade classroom.
2. 1 incubator per classroom.
3. Food for chicks after they hatch.
4. Curriculum & easy-to-use hatching resources.
5. Deliver eggs with 20-minute classroom presentation (Tuesday or Wednesday).





6. Return to classroom in 7 days for egg candling with a 20-minute presentation.
7. Return at the end of project to pick up chicks and all supplies.

Chicken eggs take 21 days to hatch. During these three weeks, teachers will need to assign responsibilities to the students to make sure the eggs have the best possible chance for hatching. Students will need to do the following activities during this unit:

1. Students turn the eggs three times each day (morning, lunch time and before they go home). Teachers will have to turn eggs at least once per day over weekends and other days school is not in session.
2. Provide humidity by pouring warm water in the pans every day.
3. Provide a home for the chicks once hatched by preparing a box with a heat lamp and shredded paper in the bottom. A cardboard or plastic box works great. The heat lamp can be as simple as a desk lamp with a 100-watt bulb (No LED bulbs).
4. Feed and water the chicks for 2-3 days after they have hatched (provided).



**Duck eggs are also available in the spring if you would like to hatch ducklings instead of chicks. Ducks take 28 days to hatch as compared to chickens which take 21.**

This program is a great opportunity for students to get excited about learning with this hands-on program.

#### **Schedule outline**

- ❖ Supplies delivered to your school one week prior to starting project
- ❖ First presentation and delivery of eggs
- ❖ Second presentation and egg candling
- ❖ Chicks hatch
- ❖ Pick up chicks and supplies the Friday of hatch week

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