

EMBRYOLOGY AND INCUBATION IN THE CLASSROOM CURRICULUM

- ❖ Overview
 - Leader's guide
 - Resources:
 - Penn State Publication – Embryology in the classroom: Don't chicken out due to unnecessary health concerns
 - Wally cat poster on safe handling of chicks
 - ASC195 Factsheet – Development of the chick
 - Cobb poster on embryo development by day
 - National 4-H curriculum (BU-07595): Hatching classroom projects
 - Published article – Poultry egg incubation: Integrating and optimizing production efficiency
 - Published article – Factors influencing hatchability
- ❖ Lesson one (Introduction)
 - Lesson plan
 - PowerPoint presentation: Lifecycle of the chicken
 - Record sheet of daily activity
 - Record sheet of periodic egg weighing and candling
- ❖ Lesson 2 (Setting up the incubator)
 - Lesson plan
- ❖ Lesson 3 (Parts of an egg)
 - Lesson plan
 - PowerPoint presentation: Parts of an egg
- ❖ Lesson 4 (How fragile is an egg?)
 - Lesson plan
- ❖ Lesson 5 (Overview of chicken embryology)
 - Lesson plan
 - PowerPoint presentation: Overview of chicken embryology
 - Embryology terminology
- ❖ Lesson 6 (Candling incubated eggs)
 - Lesson plan
- ❖ Lesson 7 (External parts of a chicken)
 - Lesson plan
 - PowerPoint presentation: External parts of a chicken

- ❖ Lesson 8 (History of the chicken)
 - Lesson plan
 - PowerPoint presentation: History of the chicken
 - Domestication timeline data (in MS word to allow for updating)
 - Blank domestication timeline (in MS word to allow for updating)
- ❖ Lesson 9 (Classification of chickens)
 - Lesson plan
 - PowerPoint presentation: Classification of chickens
- ❖ Lesson 10 (History of the American Poultry Industry)
 - Lesson plan
 - PowerPoint presentation: History of American poultry industry
- ❖ Lesson 11 (Nutrition of the egg)
 - Lesson plan
- ❖ Lesson 12 (The hatch)
 - Lesson plan
- ❖ Concluding activities and program evaluation
 - Teacher evaluation (in MS word to allow for updating)
 - Student evaluation (in MS word to allow for updating)
 - Activity: Embryology technology worksheet
 - Activity: Overall crossword puzzle
 - Selection of multiple-choice questions (25) for final exam (in MS Word to allow for updating)
 - Incubator cleaning and disinfecting instructions