Lesson Overview

In this lesson students will identify the parts of an egg and the nutrients it contains. They will explore and compare the different life stages of animals, such as the process of laying eggs. Students will learn the difference between unfertilised and fertilised eggs and describe how eggs are an essential part of a healthy diet. **Please note that as students will be handling eggs during this lesson we encourage students to wash their hands before and after handling eggs. In addition to that, we encourage you to refer to your school's health and safety policies, and follow any individual allergy action plans.**

Learning Intentions

- Identify parts of an egg and their functions
- Identify and describe the life stages of a chicken
- Compare life cycles of different animals
- Understand how eggs are an essential part of a healthy diet

Teacher Notes

Resources and Materials

- Interactive Whiteboard (IWB)
- Supporting Interactive Lesson available at https://www.australianeggs.org.au/education/primary/eggs-actly-where-do-the-eggs-we-eat-come-from/
- Magnifying glasses (1 per student)
- Eggs (Uncooked, 1 per every 3 students)
- Cameras or other photographic devices (optional)

Activity 1

- Paper plates (2 per student)
- Split pins (1 per student)
- Plates (2 per student)
- Spoons
- Latex-free gloves (1 pair per student)

Activity 2

- Craft materials (such as coloured paper, string, scissors, glue, tissue paper, staples, coloured markers, etc.)

Differentiation

Teachers are encouraged to modify the activities as required in order to cater to diverse student needs.

Assesments

There are a number of informal assessment opportunities throughout this lesson including:

- Group discussions
- Group work
- Self assessment activities
- Peer assessment activities

Language/Vocabulary

adult, albumen, air sac, blood spot, bones, chalazae, change, chick, chicken, egg, embryo, fertilised, germinal disc, growth, hen, laying, life cycle, living things, membrane, minerals, muscles, nutrients, offspring, produce, pullet, shell, supermarket, unfertilised, vitelline membrane, vitamins, yolk, young

Year 2 Curriculum Links

Science

Strand: Science Understanding

Sub-Strand: Biological Sciences

Living things grow, change and have offspring similar to themselves **(ACSSU030)**

Strand: Science Inquiry Skills

Sub-Strand: Planning and Conducting

Participate in guided explorations to explore and answer questions **(ACSIS038)**

The Arts

Strand: Visual Arts

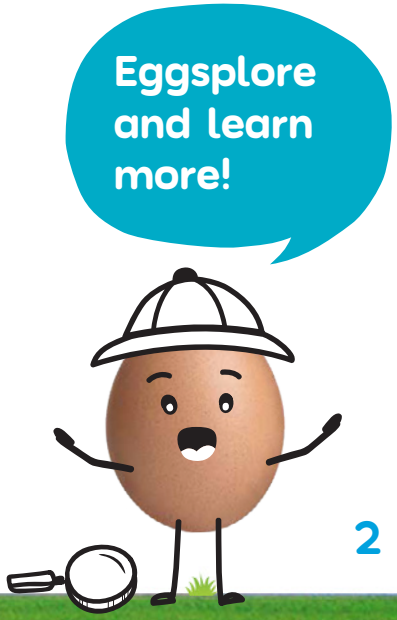
Use and experiment with different materials, techniques, technologies and processes to make artworks **(ACAVAM107)**

Cross Curriculum Priorities

Sustainability

General Capabilities

- Critical and Creative Thinking
- Personal and Social Capability



Lesson Introduction

1. Gather the students as a group. Explain that this lesson will help us to learn what eggs are made of and to develop a better understanding of chick and hen life cycles.

2. Conduct the **pre-lesson quiz** with the students and discuss the students' responses to the questions. This is a good opportunity to assess students' existing knowledge of features of animals and how eggs fit into a healthy diet.

    - All hen eggs have chicks in them. **False**
    - Eggs are just made up of a white and a yolk. **False**
    - Eggs are nutritious and good for our health. **True**
    - We eat unfertilised eggs. **True**
    - All animals grow, change and produce young. **True**

3. Explain that the eggs laid by hens can be fertilised or unfertilised. If the egg is fertilised, a chick grows inside, but if not, the egg can be taken to the supermarket for us to buy and eat. Ask the students, 'what is inside an egg?' Collect student responses and encourage a discussion around the students' ideas and own experiences of eggs.

4. Watch the **How an Egg Forms** video on the IWB. This is a good opportunity to address any student misconceptions about how eggs are laid. Relate the information in the video to student ideas from the previous discussion.

5. On the IWB, play the **Egg Layers** game to construct a complete egg and learn more about each of its parts. Click on each part to learn more about the specific functions before dragging and dropping on to the egg template.

Lesson Activities

Teachers are encouraged to select from the below activities to best suit the needs of their students and modify as required. Please note that some of the following activities will need to be set up prior to the lesson.

Exploration Activity

1. Explain that eggs are made up of several different parts which all have a specific function. Split the students into small groups of 3-4 and provide each group with a plate, an egg, pairs of latex-free gloves, spoons and some magnifying glasses.

2. Encourage the students to carefully break apart their egg and explore the contents inside to identify each part. Challenge them to separate each part of the egg to clearly display the layers. Encourage the students to use correct terminology to describe each part of the egg: **outer shell, albumen, yolk, chalazae, air sac, blood spot, germinal disc and yolk membrane (vitelline membrane).** **Teacher note:** *If candling has been done correctly, students will not always find blood spots inside their eggs.*

3. Direct students to record their findings in photographs or observational drawings with labels. Ensure students have enough time to explore their egg fully.

4. Discuss whether students found each of the parts identified in the **Egg Layers** game or if additional features were identified.

Representation Activity

1. Provide a range of creative materials such as coloured paper, tissue paper, string, scissors, coloured markers and glue.

2. Challenge students to create a lift-the-flap representation of the layers of an egg, using the art materials provided. For example, students may use the string to represent the chalazae, the tissue paper to represent the membranes, etc. Students requiring additional support with this activity may need a template or other scaffolding.

3. Display student artwork in the classroom as evidence of learning.

Lesson Activities *(continued)*

Interaction Activity

1. Gather the students as a group and watch the **How a Baby Chick Grows** video on the IWB.

2. Discuss each stage of the life cycle of a chick and ensure students can use correct terminology to describe each stage: egg, embryo, chick, pullet ('pull-it'; a teenaged hen) and adult.

3. Provide each student with two paper plates, scissors and a split pin. Challenge students to divide one plate into five sections and draw one stage of the life cycle of a hen in each section. Encourage students to further extend their learning by writing a short description of each stage underneath their drawings.

4. Ask students to cut a section out of their other plate in a way that would reveal a single stage of the life cycle when placed on top of the first plate. Teachers should refer to the instructions slide on the IWB for a visual representation of this process.

5. The plates can then be secured in the middle with the split pin, creating an interactive life cycle which reveals each stage in turn.

6. Share and discuss as a class.

Lesson Closure

1. Explore the **Egg Nutrients** activity on the IWB. Click on each of the nutrients found in eggs to find out how each nutrient supports our health and nutrition.

2. Conduct the **post-lesson quiz**. This is a good opportunity to assess student learning from the lesson.

   - Only fertilised eggs have chicks in them. **True**
   - Eggs are made up of several parts with lots of layers. **True**
   - A fully grown chicken is called a pullet. **False**
   - An egg yolk is held in place by the chalazae inside the egg. **True**
   - Another name for the yolk membrane is the vitelline membrane. **True**

Going Further

1. Encourage students to collect photos of themselves at different stages in their lives and display these as growth timelines in the classroom. Discuss the similarities and differences between our life cycle and that of a hen. Select other animal life cycles to compare or contrast with ours.

2. Gather students' favourite egg recipes and create a class recipe book as special gift book or school resource.

3. Book in a hatchery experience in your classroom at **https://www.australianeggs.org.au/education/pages/hatchery** and watch the chick life cycle in real time!