



# AGRICULTURE, FOOD AND NATURAL RESOURCES CLUSTER

## LESSON 5

<b>Lesson Plan Title:</b> Incredible Eggs		<b>Instructor:</b>
<b>Suggested Total Time for Lesson (minutes):</b> 60 minutes (1 day)		
<b>Content Focus - What will Students Learn? (Content Skill Sets)</b>		
<p>0972.AG.0139.3 Quality control.          0972.AG.0139.2 Production processes.          0972.AG.0101.38 Define and differentiate the quality and yield grades of food products and what they mean to the consumer.</p>		
<b>Materials and Resources- What do you need to assemble and prepare before the lesson?</b>		
<b>Materials:</b> <ul style="list-style-type: none"> <li>• 1 dozen eggs</li> <li>• 1 dozen brown eggs</li> </ul> <p><i>Can be store-bought eggs, but farm eggs will provide more variety of defects.</i></p> <ul style="list-style-type: none"> <li>• Flashlight, one per station.</li> </ul> <p><b>Note:</b> Students' cell phones are a very effective light source for this activity but if desired acquire flashlights and shoe boxes. Cut a ¼ inch hole in the shoe box and place the flashlight into the box. Turn flashlight on. Egg will be candled at the hole in the box.</p>		<b>Resources:</b> Egg Candling PowerPoint
<b>Lesson Outline: What learning activities will your students do?</b>		
<b>Time</b>	<b>Sequence/Description of Learning Activity</b>	
5 minutes	<p><b>Get Started/Explain:</b>          Set out the eggs at various stations, 6 eggs per station resulting in 4 stations. Number the eggs by writing on them lightly with a pencil. Provide one flashlight/light source and show box per station or one student per group may use a cell phone flashlight if permitted. At the conclusion of the PowerPoint, you will arrange students in groups of four.</p> <p><b>Discussion: Terms to know:</b>  <u>Albumen</u> – the white liquid substance inside of the egg that provides protein in our diet, protection for the yolk, and nutrition for the growing embryo (if the egg is fertilized and a chick is developing).  <u>Yolk</u> – the yellow, thicker ball of liquid inside of the egg and contains mainly the energy/fat source of nutrition in our diet as well as the growing embryo (if the egg is fertilized and a chick is developing).  <u>Air Cell</u> – an empty area inside the egg. This forms after the egg is laid and the egg temperature cools which causes the contents of the egg to condense.  <u>Candling</u> – The process of inspecting eggs for quality, freshness, and soundness.  <u>Soundness</u> – the quality of the eggshell. A sound egg contains no cracks.</p>	
25 minutes	<p><b>Discover/Engage/Practice:</b>          Project and present the PowerPoint “Egg Candling”</p> <p>Concluding quiz slides are included in the PowerPoint at the end.</p>	
20 minutes	<p><b>Check for Understanding/Summarize/Close:</b>          4 Egg Candling Stations will be set up for the groups of 4 to candle them using the provided light source. Allow them 5 minutes per station. Groups will designate one recorder to document the findings of each egg. Ensure that they record the egg number on their papers as well. Instruct them to record the defect or no defect.</p>	
10 minutes	<p>Bring the class back together and discuss the findings of each egg station.</p>	

***Modifications, Support, and Extensions (for those students with IEP)***

***Reflection- Did the students learn the content outlined in the lesson focus? Why or why not?***