

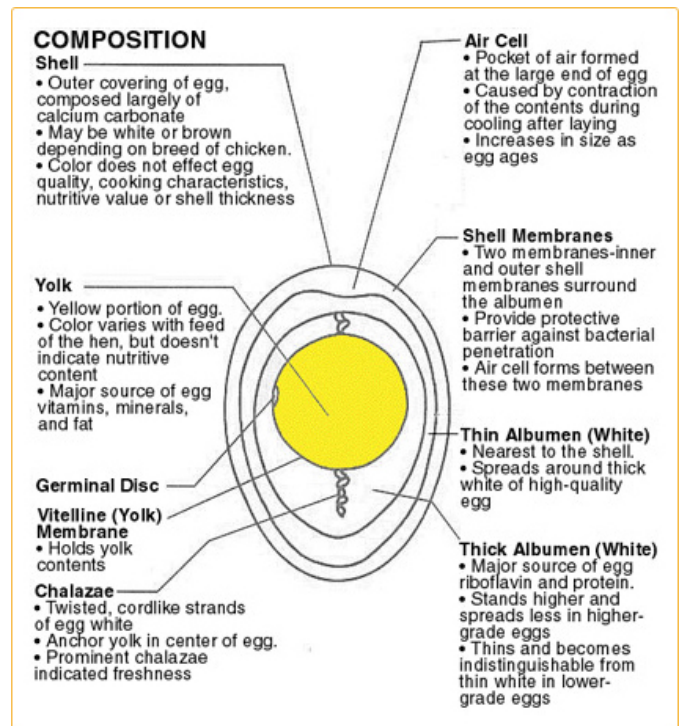
## Egg-cellent Egg-tivities – Part Two

Let's learn all about eggs! What are eggs, anyway? What animals do they come from? What are the different parts made of? What can we do with eggs?



### All About Eggs

- **Definition of egg:**  
an oval or round object laid by a female bird, reptile, fish, or invertebrate, usually containing a developing embryo. The eggs of birds are enclosed in a chalky shell, while those of reptiles are in a leathery membrane.
- Most of the eggs we eat come from chickens.
- Inside an egg is the egg white surrounding the round yellow yolk.
- If the egg is fertilized an embryo will grow inside. In the case of a chicken's egg, the embryo will grow into a baby chick!
- All birds lay eggs: turkeys, geese, ducks, and wild birds too!
- Eggs shells can be different colors. We see lots of white or brown eggs, but eggs can be yellow, green, or even blue!
- Reptiles such as turtles, snakes, and frogs lay eggs. Fish, crabs, and many insects lay eggs also.



## Glowing Egg

People who raise chicks use a technique called **candling** to determine if an egg is fertilized and has a chick growing inside of it. Your eggs from your refrigerator at home will not have a chick growing inside, but this is a really neat way to look inside an egg!

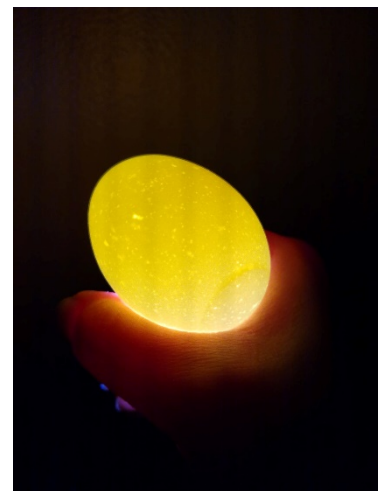
### Supplies

- One egg
- Flashlight
- Dark room



### Instructions

1. Hold the egg gently in your hand (or ask an adult to help you) and press the flashlight carefully against the eggshell.
2. Carefully rotate the egg to see it from different angles.
3. What can you see? Do you see the spots in the egg shell? Do you see the air cell?
  - a. The egg shell is almost entirely composed of calcium carbonate. There are pores in the egg shell that allow some breathability to the shell.
  - b. The air cell forms when the egg is laid. You can see where the air cell was when you look at the flat end of a boiled egg.



## Floating Egg

Learn about density and buoyancy through this floating egg experiment. Don't forget to make your hypothesis about what will happen to each egg!

### Supplies

- Two eggs
- Two tall drinking glasses
- Three tablespoons of salt
- Water



### Instructions

1. Fill one glass  $\frac{3}{4}$  of the way with water.
2. Make a hypothesis about what will happen to the first egg.
3. Carefully place the egg into the glass of water and observe. What happened to the egg?
4. Fill a second glass  $\frac{3}{4}$  of the way with water.
5. Add 3 tablespoons of salt and stir.
6. Make a hypothesis about what will happen to the second egg.
7. Carefully place the second egg into the second glass of water and observe. What happened to the egg?

You are seeing changes in **density** in action! Density is how much space something takes up in relation to how much matter it is made of. The first egg sinks because the water is less dense than the egg. When you add salt to the water, the water density increases to become more dense than the egg, allowing the second egg to float.

*Tip: If an egg floats in water without adding salt, the egg is likely old. The air cell has grown inside the egg, making it buoyant. Check the egg for a bad smell before you eat it.*

