



## RECHENKA'S EGGS

By

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Each year at Easter, families of many different faiths gather to dye eggs so that they can be used in Easter Egg Hunts. Before eggs are dyed, they are hard-boiled. If a colored egg is to be used for making egg bread, it should not be cooked before it is colored.

Is there a simple, scientific way to distinguish a raw egg from a cooked egg? What would one do if the eggs were mixed up after they were colored? Solve this dilemma for yourself with this simple activity and then share it with your students!

**MATERIALS:** 1 raw egg, 1 hard-boiled egg, salt, water, clear cups or containers (a plastic tennis ball container is a possibility)

**ACTIVITY:** Spin both eggs. The cooked egg will stand on its end but the raw egg cannot. This is not always easy to do. Spin both eggs again, stop them by touching them with your finger, and then quickly release them. A cooked egg will stay still, but a raw egg will wobble and will try to rotate again.

Dissolve about 8 tablespoons of salt in 500 ml or 2 cups of water.  
Try to float both eggs.

**EXPLANATION:** The raw egg is asymmetrical; the fluid inside the egg will be rotating when it is stopped, and it will continue to rotate when the egg is released. The hard-boiled egg is less dense because of its increased air space. The hard-boiled egg will float more easily than the raw egg.

**SOURCE:** THE FLYING CIRCUS OF PHYSICS WITH ANSWERS, Jearl Walker, ISBN 0-471-02984-X.

CHEMISTRY IS FUN: Vol. 1, Mickey and Jerry Sarquis, ICE, University of Wisconsin-Madison, Madison, WI 53706.

**STANDARDS:**

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Polacco, Patricia. Rechenka's Eggs. Philomel Books, 1988, ISBN#0-399-21501-8.