



Science, Engineering,
Technology & Math

EGGS

Class Structure

Week #1: INTRODUCTION

- Egg Kahoot!
- Structure of an Egg
- Egg Russian Roulette Intro

Week #2: NAKED EGG

- Naked Egg Experiment (Creation with Vinegar)
- Naked Egg Experiment (Completion with Food Coloring)
 - Osmosis/Bouncing

Week #3: EGG STRUCTURE

- Walking on Eggs
- How Strong is an Eggshell (Stack with Books)
- Hardboiled Eggs
 - How To Make Them
 - Change Shapes

Week #4: EASTER

- Decorating Easter Eggs
- Easter Egg Hunt

Week #5: EGG DROPS

- Humpty Dumpty Story
 - Build Our Own Humpty Dumpty Story (Egg Drop)
- Egg Drop (Glasses and Tray)

Week #6: EGG CONFETTI

- Egg Confetti

Week #7: EGG FUN!

- FUN DAY!
 - Egg Races
 - Egg Bobbing
 - Egg Russian Roulette

Week #1: INTRODUCTION

We only had one day in the first week, so I smashed all of these ideas together, and it went very well...

- Egg Kahoot! (To test their knowledge of the world of eggs)
 - https://create.kahoot.it/?_qa=1.239203971.1653822744.1455741718&deviceId=160182e3-7312-45e7-a34d-8913131a3d78#quiz/76b77a0d-c9d3-490a-8ead-8c8e1f10eb77
 - (^ the link for the Egg Kahoot that I created)
- Talk about structure of an egg
 - Why can an egg sit on her eggs without breaking them?
 - Experiment breaking the eggs (give everyone one egg and have them try to squish it longways and sideways with their bare hands...OUTSIDE!)
- Introduce rules and regulations for class/expectations/what is this class about?



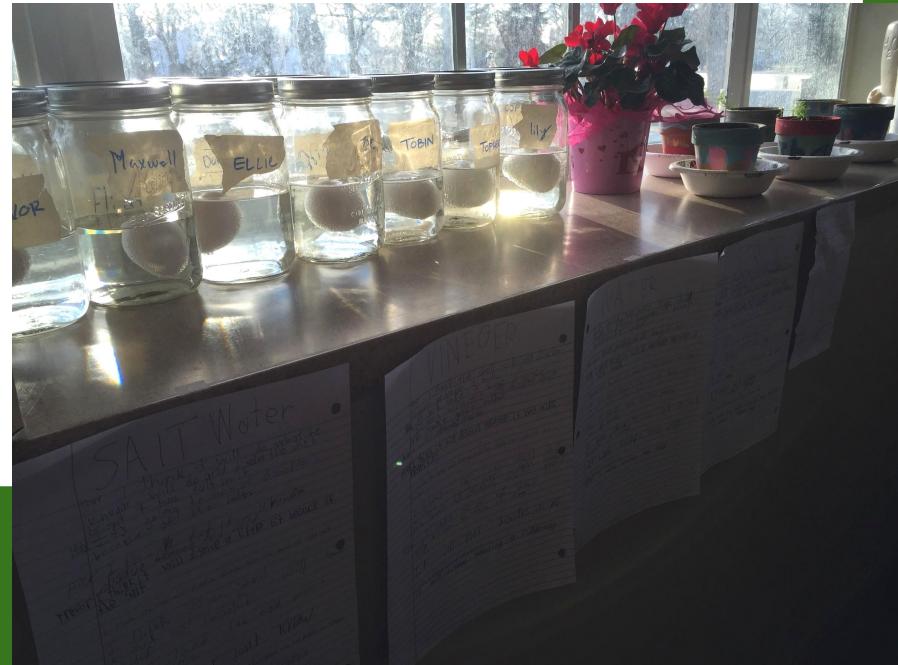
IMPOSSIBLE EGG CRUSH

*Egg Crush Example
Video*

Week #2: NAKED EGG (Part 1)

Materials Needed: large mason jars, vinegar, eggs, soda (any kind will work), salt, water

Place the eggs in a large mason jar and pour in the vinegar (until it covers the egg). Make your predictions about each liquid (vinegar, soda, salt water, water) and its effect on the egg shell. We did ours on separate papers. The experiment will take 3 days to complete!



Week #2: NAKED EGG (Part 2)

Materials Needed: toothbrushes, corn syrup, water, food coloring

Carefully take the eggs out of their mason jars after 3 days. The shell should be gone or close to it. Also very carefully, scrub the egg with a toothbrush to remove all of the remaining shell. After cleaning it off, replace the vinegar in the jar with corn syrup. The corn syrup will shrink the egg. This process should take a day to occur.

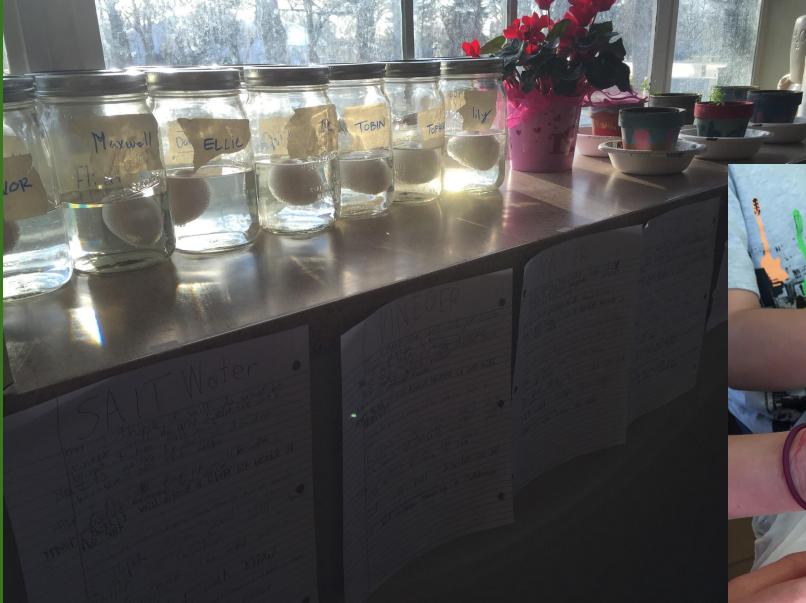
After shrinking the egg, replace the corn syrup with colored water and place the egg inside the jar. Leave them for a few days. At the end, you should have a bouncy, colorful egg!

Source: http://www.playdoughtoplato.com/cool-science-experiments/#_a5y_p=3482934

Week #2: NAKED EGG (Part 2)



Week #2: NAKED EGG (Part 2)



Week #2: NAKED EGG (Part 2)



Week #3: EGG STRUCTURE (Part 1)

WALKING ON EGGS

Materials Needed: garbage bags, a few dozen eggs



Week #3: EGG STRUCTURE (Part 1)

Week #3: EGG STRUCTURE (Part 1)

Materials: egg shells, paper holders (for the eggs), things to put on top of them!



Week #3: EGG STRUCTURE (Part 2)

Materials: 1 ½ inch boxes (cardboard will do), rubber bands, hardboiled eggs

Objective #1: Teach how to hardboil an egg

Objective #2: Teach about what is happening to the egg while it is boiling

Objective #3: Change the shape of the egg

Source: <http://www.scientificamerican.com/article/shape-shifting-science-molding-hard-boiled-eggs/>

Check out the link...it's awesome!

Week #4: EASTER (Part 1)

Materials Needed: vinegar, food coloring, crayons, hardboiled eggs, plastic cups, newspaper/garbage bags

Let them design whatever they want with the crayons on the eggs before dipping them into the vinegar.
You could also buy egg coloring kits and add vinegar for brighter colors.

Week #4: EASTER (Part 2)

Materials Needed: the hardboiled eggs from the past lesson!

I hid all of the eggs from the previous lesson all over a certain section of the park. They had to find the ones that they made from the day before. People with the earliest finishing time get a prize.

I also hid plastic eggs filled with candy for an extra prize.

Week #5: EGG DROPS (Part 1)

Materials needed: raw eggs, crayons, different soft materials (sand, packing peanuts, bubble wrap)

After showing the video, challenge the kids to create their own Humpty Dumpty story. They can decorate their own Humpty Dumpty egg and then drop him off of a wall! Place their choice of packing materials (in a plastic Ziploc) on the ground and drop the egg off!



Week #5: EGG DROPS (Part 2)

Materials Needed: whatever you want to give them to create their own naked egg drop!

There are a million ways to go with an egg drop, and it's really up to you. They love this activity! I suggest giving out prizes...it's really motivating.

Week #6: EGG CONFETTI

Materials Needed: eggs, confetti, fruity pebbles, tissue paper, glue, pin/needle, scissors

Source: The website below is really what I used for this activity... I thought it gave an excellent description of what to do, and I don't have to recount it here!

<http://ohhappyday.com/2011/04/diy-party-confetti-egg-game/>

After we finished making our eggs, we played egg Russian roulette with them!



Week #7: EGG FUN!

I chose to finish the Egg session playing tons of fun egg games like...

- Egg/Spoon races
- Egg Russian Roulette (with raw eggs)
- Egg Tosses
- Another egg hunt

It was a fun way to end the session!