

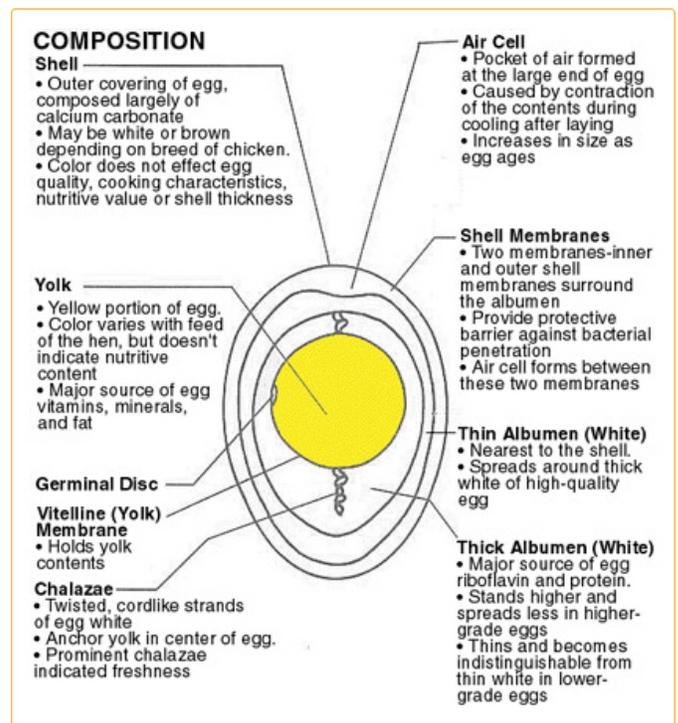
## Egg-cellent Egg-tivities – Part 1

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.



## Egg Carton Art

Save that egg carton! It can be upcycled and turned into so many amazing things. You can cut it, glue it, build with it, paint it, use it to hold small loose things like beads or pretty rocks. There are endless possibilities!



This activity will show you how to cut apart an egg carton to make upcycled flowers. Share your egg carton creations with #dailydiscovery!

## Supplies

- Egg carton(s)
- Scissors
- Optional: Glue, decorative paper, paint, paintbrush



## Instructions

1. Ask an adult to help you cut out the center pointy pieces of the egg carton. Be sure to leave plenty of the “petals” on them.
2. Use the scissors to cut out the petals of the flower. Try cutting them in different shapes!
3. Cut a long sturdy stem piece with a little tab on one end from a flat part of the egg carton.
4. Make a hole in the base of the flower and thread your stem through the hole with the tab resting inside the flower. That will keep the stem from sliding out of the flower. *Optional: use glue to keep the stem in the flower.*
5. Use paint (if you have some) to decorate your flowers. Be creative! You can also use paper to make leaves or more petals on the flower. Let the flowers dry and then pop them in a vase to bring cheer!

## Natural Egg Dying: Cooking with Science!

Experiment with these natural dyes to make beautiful, colorful eggs that are totally edible! The best part is, you can make these dyes using items you have in your kitchen, and you don't have to waste any food in the process. *Adult supervision is required for this activity.*



### Supplies

- Hard-boiled Eggs (recipe below!)
- Saucepan
- Water
- White vinegar
- Clean kitchen or paper towels
- Natural dying materials from your kitchen (Suggestions: beets, ground turmeric, coffee, spinach, yellow onion skins, red cabbage, yellow delicious apple peels)
- Slotted spoon
- Small bowls
- Cheesecloth, fine sieve, or strain

#### Natural Color Palette:

Pale Green: Spinach  
Blue: Red Cabbage  
Pinkish Red: Beets  
Yellow: Ground turmeric  
Greenish Gold: Yellow delicious apple peels  
Beige/Brown: Coffee

### Instructions

1. Gather materials for your natural dyes. This is a great opportunity to reduce, reuse, and recycle! Try using your kitchen waste like yellow onion skins, any stale coffee, or apple peels for dyes! If you use fresh produce, like a beet or red cabbage, think about how you might eat the boiled vegetables afterwards.
2. Now comes the fun part! Experimenting with different natural materials can produce surprising colors, and don't hold back from mixing 2 or more materials together to achieve new colors.
3. Prepare your natural materials into liquid dyes according to which materials you are using. Always use adult supervision when you are using the stove or chopping vegetables.
  - a. For the whole vegetables, like red cabbage or beets, chop them into smaller pieces first

- (around one inch). Place 1 cup of desired material in your saucepan and cover with 1 quart of water. Simmer the mixture for 30 minutes, or until desired color is achieved. Strain mixture and reserve the liquid.
- b. For the spinach, onion skins, or apple peels, place about 2 cups of desired material in saucepan and cover with 1 quart of water. Simmer the mixture for 30 minutes, or until desired color is achieved. Strain the mixture and reserve the liquid.
  - c. For the ground turmeric, place 2 tablespoons of turmeric in 1 quart of water. Simmer the mixture for 30 minutes. Strains the mixture if you are using cheesecloth, otherwise, don't worry about straining. Reserve the liquid.
  - d. If you are using stale coffee, there are no preparations needed. Skip ahead to the next step!
4. Place reserved liquids in individual small bowls. Stir in 2 tablespoons of white vinegar per every cup of liquid dye.
  5. Retrieve your hard-boiled eggs when you are ready to dye. Make sure to keep them refrigerated at all times when you are not using them!
  6. Use a slotted spoon to slowly lower your hard-boiled egg into desired color dye. Refrigerate the bowl to let the dye soak into the eggshell.
  7. Time for the big reveal! After at least 30 minutes, use your slotted spoon to remove the egg from the dye.
  8. Pat the egg dry using paper towels or a clean kitchen towel. To mix colors, you can soak an egg first in one colored dye for 30 minutes or more, followed by a second soak in another colored dye for 30 minutes to an hour. Get creative and experiment with different soak times and color mixtures to achieve a whole spectrum of colors!
    - a. Note that natural dyes will produce a subtler color than artificial dyes. For more vibrant natural colors, you can soak your eggs in the refrigerator overnight.
  9. Store the colored eggs in an egg carton in the refrigerator until you are ready for an egg-celent snack.



## Perfect Hard-boiled Egg Recipe

1. Place eggs out at room temperature 20 minutes before boiling. Begin with eggs that are cool, not cold.
2. Place your cool eggs in a large saucepan, making sure there is enough space so the eggs lay in a single layer. Fill the saucepan with water until the water line is about 1 inch above the eggs.
3. Heat the water until it is just about to boil, then turn off the heat and place a lid on the saucepan. Set a timer for 25 minutes.
4. Use a slotted spoon or wire egg holder to transfer all of your eggs to a bowl filled with water and several ice cubes immediately after cooking. This technique is called an **ice bath**, which halts the heating process so that the eggs don't become overcooked.
5. Remove eggs from the ice bath, pat dry, and store in your refrigerator immediately until you are ready to eat or dye!



## Cooking Safety

Decorating and hunting for eggs can be a lot of fun, but if you plan on eating your eggs make sure you follow these safety recommendations:

- Always use adult supervision when you are cooking, especially when operating the stove, handling boiling water, or using a sharp knife to chop.
- Use only food-safe decorating and dyeing materials.
- When you aren't actively working on your eggs, put them back in the refrigerator.
- Don't eat eggs that have sat at room temperature for longer than 2 hours.
- Don't eat eggs that have cracks in their shells.
- If you are hiding eggs outside, make sure they don't touch any animals or fertilizers.