



Spring Eggs-ploration

Spring is in the air and the birds are busy building nests and laying eggs.
Try this cool activity to see if you can create your own designer eggs.

What you will need:

Eggs, red cabbage, water, a pot, cotton swabs, lemon juice or vinegar, baking soda, a teaspoon, 2 small cups, a spoon, and paper towels

What to do:

1. Place the eggs in the pot and cover them with cold water. You can do this in batches if you need a large number of eggs.
2. Tear the red cabbage leaves and place them in the pot. Place one large leaf over top of all of the eggs. The more leaves you use the darker your eggs will be.
3. Ensure that the eggs are completely covered with water, adding more if necessary.
4. Bring the water to a boil on your stovetop. Turn the element off once the water has reached the boiling point and allow the eggs and cabbage leaves to sit in the pot overnight.
5. Take the eggs out of the water and pat them dry.
6. In one small cup, create a paste by stirring 1 tsp of baking soda into 1 tsp of water. Pour a small amount of lemon juice or vinegar into the second cup.
7. Have the children dip a cotton swab into one of the liquids and use it to either dab or draw lines on the egg. Have a separate swab for each liquid to avoid cross-contamination.
8. Observe what happens to the egg!



What is happening?

Red cabbage contains a water soluble pigment which belongs to a family of compounds called anthocyanins. Many other fruits and vegetables, such as blueberries and beets, also contain these compounds. Many of these pigments change colour when they come into contact with an acid or a base. In this experiment, the eggshell absorbs the pigment from the cabbage juice, turning the shell blue. Lemon juice and vinegar are acids and will change the shell from blue to red; while baking soda is a base and will change the shell from blue to green.

Eggs-tensions:

1. Try cooking the eggs along with other natural dyes, such as those found in blueberries, radishes, onion skins or tea.
2. Try other kitchen liquids on your cabbage-dyed eggs to see what colour the eggshell turns. Use your results to determine if the liquid is an acid or base.

