

# Imagine Your Story: Sleeping Beauty

Join Ms.  
Michelle **LIVE** at  
**2pm, Tuesday,  
August 4** for a  
story and craft  
with the items in  
your Sleeping  
Beauty activity  
pack!

Follow the link at

[www.Osceolalibrary.org/  
Summer-Learning](http://www.Osceolalibrary.org/Summer-Learning)

The folktale begins with a princess whose parents are told by a wicked fairy that their daughter will die when she pricks her finger on a particular item.

*In Basile's version, the princess pricks her finger on a piece of flax. In Perrault's and the Grimm Brothers' versions, the item is a spindle.*

The parents rid the kingdom of these items in the hopes of protecting their daughter, but the prophecy is fulfilled regardless. Instead of dying, as was foretold, the princess falls into a deep sleep. After some time, she is found by a prince and is awakened.



## Calming Bath Salts

### Ingredients

- 1½ cups Epsom Salt
- 1/2 cup of Sea Salt (I like the Himalayan for the pink color)
- 1/3 cup baking soda
- 1/8 cup dried Lavender Flowers
- Lavender Essential Oil
- Glass jar for storage

### Directions:

1. Combine 1½ cups of Epsom salt, 1/2 cup of sea salt, 1/3 cup of baking soda, and 1/8 cup dried lavender flowers in a mixing bowl.
2. Add 10 drops of lavender oil.
3. Mix ingredients and place in a air tight glass jar to store.

**To Use:** When running the bath water spoon in 1 tablespoon of the mix into the bath.

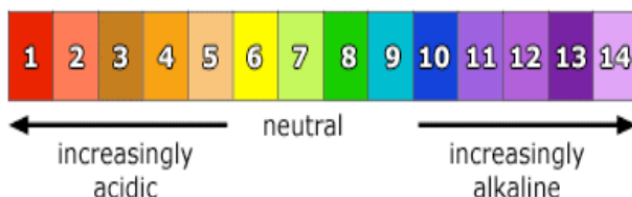


# Color Changing Science!

*In Disney's 1959 animated film **Sleeping Beauty**, the fairy godmothers use their magic to turn Aurora's dress blue and pink. Make your own "magic" with the science experiment below!*

## Introduction:

Liquids all around us have either acidic or basic (alkaline) properties. For example, acids taste sour; while, bases taste bitter and feel slippery. However, both strong acids and strong bases can be very dangerous and burn your skin, so it is important to be very careful when using such chemicals. In order to measure how acidic or basic a liquid is, one must use the pH scale as illustrated below:



The strength of the pH scale is determined by the concentration of hydrogen ions (H<sup>+</sup>) where a high concentration of H<sup>+</sup> ions indicate a low pH and a low concentration of H<sup>+</sup> ions indicate a high pH. The pH scale ranges from 1 to 14 where 1 to 6 is classified as acidic, 7 neutral (neither a base nor an acid) and 8 to 14 is classified as basic. In this lab, you will use the juice from red cabbage as a pH indicator to test common household liquids and determine their pH levels. You will mix cabbage juice with different household liquids and see a color change produced by a pigment called Flavin (an anthocyanin) in red cabbage. Through this color change, you will be able to successfully identify the approximate pH of common household liquids using the table below:

Color:	Pink	Dark Red	Violet	Blue	Blue Green	Green
Approx pH	1-2	3-4	5-7	8	9-10	11-12
Acid/ Base	Acid	Acid	Acid/Neutral	Base	Base	Base

Strength increases at extremes of this scale.

## Liquids to Test:

- Lemon Soda
- White Vinegar
- Apple Juice
- Baking Soda
- Shampoo (preferably clear)
- Conditioner (preferably clear)
- Hand Sanitizer

## Materials:

- Cabbage Powder (**included in activity pack**)
- Measuring Spoon
- Cups
- Water

## Pre-Laboratory Predictions:

Look at each of the liquids being tested. Predict whether each of the substances is acidic, neutral or basic. Circle one. (Think about the properties of acids and bases.)

Hand Sanitizer	Acidic	Neutral	Basic
Lemon Soda	Acidic	Neutral	Basic
Apple Juice	Acidic	Neutral	Basic
White Vinegar	Acidic	Neutral	Basic
Baking Soda	Acidic	Neutral	Basic
Shampoo	Acidic	Neutral	Basic
Conditioner	Acidic	Neutral	Basic

## Instructions:

1. Measure a small amount of the red cabbage powder to a 3 oz. cup of water for each liquid you are going to test.
2. Add about 5 drops of 1 of your test liquids to 1 of your 3 oz. cups with cabbage powder. Check the color of the water with the chart above to determine pH level of the tested liquid.
3. Repeat step 2 for each of the liquids you would like to test.

**Were your predictions correct???**

**Did any of the pH levels of the liquids surprise you???**

**You have just completed an official laboratory experiment. Congratulations!**