

## Berry Ink

**Time:** 45-60 minutes

### **Materials needed:**

- Measuring cup
- Small bowl
- Spoon
- 1c. Ripe berries (blackberries or raspberries work best) [Note: More may be needed for large groups]
- Small strainer (no larger than the jar mouth)
- Small Mason jar with lid
- 1 teaspoon vinegar (per 1c ripe berries)
- 1 teaspoon salt (per 1c ripe berries)
- Dixie or small paper cup
- Writing paper (thicker paper like cardstock works best)
- Quill pen made from craft feather [Instructions for how to make these can be found below. Older students may want to try their hand at making their own quills]

### **Introduction:**

People wrote lots of letters during the 1800s, but those letters would sometimes take a very long time to arrive at their destinations. If the letters were intended for someone overseas, in perhaps a place like England or France, they might take months to arrive! Letters were also very time-consuming to create. People would need quills, ink, wax, signets, and paper. They would usually make these items, unlike today when we can purchase everything we need to write a letter in one store. This activity allows students to make their own berry ink to use with homemade or store bought quill or calligraphy pens.

### **Activity Steps:**

1. Rinse berries under water.
2. Have students divide into groups of two.
3. Place a small handful of berries in the strainer. Taking turns, Use the back of the spoon to crush the berries so that the juice drips into the Mason jar. Have one student hold the jar steady while the other crushes the berries.
4. Once the berries have been crushed, discard the berry pulp in the strainer.
5. Go around the room and add the vinegar and salt to the berry juice.
6. Place the Mason jar lids on TIGHTLY and have the students mix well by shaking the jars (until the salt is completely dissolved).
7. Pour a little of the ink from the jar into each student's Dixie cup. That will be their ink well.
8. Have the students use the ink with their quills to write on the paper. See if they can match the handwriting sample attached. Additional time can be added to the activity in the form of a writing assignment using the ink.
9. Pour the ink into a jar and tighten the lid when not in use. Berry ink can spoil quickly, so only make the amount of ink you will need for one day at a time.

Have a class discussion about the activities. What did they learn from making their own ink? What happens when you make a mistake (i.e., spelling error or smudge the ink)? Have they thought about the time it would take a letter to get to its intended recipient in the 1800s, while today we can communicate information almost in an instant? If your students wrote letters or diary entries, what did they write about? How might what they wrote compare to writings in the past?

### **Make your own Quill**

#### **Materials needed:**

- large feather like the one below (can be found in most craft stores)



- scissors, box cutter, or exacto knife
- Toothpick

#### **Activity Steps:**

1. Cut the tip of the quill at a sharp angle



2. Use a toothpick to clean out any debris from inside the quill tip
3. Cut a slit on the tip, like so



For more detailed and more accurate tips, check out the links in “Further Information”.

Writing Sampler

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A B C D E F G H I J  
K L M N O P Q R S  
T U V W X Y Z

*a b c d e f g h i j k l m n*  
*o p q r s t u v w x y z*

*1 2 3 4 5 6 7 8 9 0*

## Background Information

### Pens

- Ancient Egypt - scribes used reed pens dipped in cakes of ink to write on papyrus
  - Very rigid and the tip didn't last long
- Quills - pens made from the molted flight feathers of birds
  - Popular in the west from the 6th to the 19th century
  - Replaced by more durable steel pens

Egyptian Scribal Palette (reed pens and ink cakes in a traveling case)



Quill Pens (sometimes they cut down the feather)



## Ink

- Used and made by many different cultures throughout history
- China
  - 2300 B.C.
  - Made from pine sap or hide glue, carbon black, lampblack, and bone black pigment ground together
- India
  - 400 B.C.
  - Made from burnt bones, tar, and pitch
- Greek/Roman
  - Made from soot, glue, and water
- European inks
  - 5th to 19th century - Iron Gall ink - iron salts and tannic acids
  - 12th century - Hawthorn ink - made using dried bark from branches of hawthorn trees mixed with wine and iron salt

## **Further Information:**

- Good outline of how to make the pen, complete with pictures. How to Make a Feather Quill Pen - <http://www.stormthecastle.com/paper-making/how-to-make-a-feather-quill-pen.htm>
- Video on history and how to make quill pens - <https://youtu.be/eDbtJOjFv7s>