

## **Science Cycle 3--GROUP WORK: Identity**

### **What you will learn:**

Where did you get your eye color? How about your hair color? Genetics, it's all genetics! This quarter we will focus on Identity and revealing how our identity is formed through the lens of science. Breakthroughs in the field of genetics have lead us to some important discoveries. With the mapping of the human genome, a big accomplishment of our time in the world of science, scientists are able to uncover more genetic information than ever before. During this quarter you will discover the basics of genetics. We will also take a "hands-on" approach as we dig deeper in our lab experiences.



# **identity**

### **Guiding Questions:**

- 1: *What is DNA? (8.LS.6)*
- 2: *How can you predict which characteristics will be passed from parents to offspring?(8.LS.2. 8.LS.4)*
- 3: *How does the environment select for traits that will increase the likelihood of reproduction and survival of the individuals with those traits? (8.LS.5, 8.LS.9)*
- 4. *How can we re-create Mendel's pea experiment? (8.LS.10)*

### **What you will do:**

- 1. *Extract DNA from your cheek cell.*
- 2. *Bikini Bottom Genetics.*
- 3. *Baby Pierre Mystery*
- 4. *Discuss "Ethics in Genetics"*
- 5. *Re-create Mendel's famous pea experiment.*
- 6. You will make a difference in your Oak Farm school community through science and math.