

## **Title:** Genetic Trait Fractions

**Objective:** Use fractions to represent group data; identify inherited physical traits

**Time:** 5 minutes

**Materials Needed:** Dry erase slates; dry erase markers

### **Greeting**

Suggested Season: Any

Suggested Grade Level: 3-5

Indoors or Outdoors: Indoors

Theme: Heredity

Topic: Fractions

## **Directions:**

1. Create groups of students with 4-6 students in each group.
2. Choose a physical trait such as eye color. Give students time to observe this trait within their group.
3. Tell students to write their data using fractions on the slates. For example in a group of four, if three students have blue eyes and one student has brown eyes in a group, this group could write:  $\frac{3}{4}$  blue,  $\frac{1}{4}$  brown.
4. Share data with class. If time allows, create fractions representing the whole class by adding the fractions together.
5. Students greet each other based on this trait. "Good morning, blue eyes. Good morning, brown eyes."
6. Continue with other traits as time allows. Ideas include hair color, height, freckles, glasses, boy/girl, etc.

## **Discussion Questions:**

1. Why do physical traits vary within our classroom?
2. What determines these physical traits?

## **Standards Addressed:**

Science: 3.4.3.2.1 ; 3.4.3.2.2.

Language Arts: K.I.B.; K.II.B.; K.III.A.; 1.III.A.; 1.III.B.1.; 2.III.A.; 3.III.A.1.; 3.III.A.2.; 5.III.A.1.; 5.III.A.2.

Math: 3.1.3.1.; 3.1.3.3.; 4.1.2.6.; 5.1.3.4.

Social Studies:

## **Background Information:**

- Heredity is the passing on of characteristics from one generation to the next. This is why offspring look like their parents.
- The study of heredity is called genetics, and scientists that study heredity are called geneticists.
- Living things inherit traits, or physical characteristics, from their parents. Children resemble their parents because they inherit their parents' hair and skin color, nose shape, height, and other traits.

## **Additional Resources:**

- <http://library.thinkquest.org/19037/heredity.html>

This website contains information on how children inherit traits from their parents.

## **Correlates with:**

Activity – Nature Fractions

News and Announcements – Fraction Facts