

Title: Fraction Parts of the Whole	Grade: 3rd Grade
Content: Science & Math	Duration: 15-20 minutes

Standard:

- **3.NF.1:** Understand parts of a fraction of the whole.

Objective: Students will use objects outside to explore fractions as a whole.

Materials:

- Pile of leaves, sand, or mud

Introduction Description:

Fractions are all around us. If the weather is nice we should get outside to find how we can use weather related items to explore fractions. If you are unable to get outside you can use a pile of toys, pennies, or any other object laying around.

Steps:

- Go outside and collect a pile of the same related item. Create ONE big pile
 - Students can collect leaves, sand, mud
- Create ONE big pile.
 - How many piles do you have?
 - Students should say they have one pile.
 - The pile represents one whole.
- Take that same pile and divide it into two equal piles.
 - How many piles do you have?
 - Students should say they have two piles
 - The two piles represent the fraction $1/2$.
 - One pile is $1/2$ of the whole and the second pile is the other $1/2$ of the whole.
- Make one pile again. This time divide the leaves into three equal piles.
 - How many piles do you have?
 - Students should say they have three piles.
 - Each pile represents $1/3$ or the whole pile.
 - How many $1/3$ piles do you have?
 - Students should explain how they know the answer is three.
- Make one pile again. This time divide the leaves into four equal piles.
 - How many piles do you have?
 - Students should say they have four piles.
 - Each pile represents $1/4$ of the whole.
 - How many $1/4$ piles do you have?
 - Students should explain how they know the answer is 4.
- Answer these questions
 - What would one pile of leaves equal if you divided the whole into 5 equal parts?

- Students should say $\frac{1}{5}$ of the whole pile.
- What would one pile of leaves equal if you divide the whole into 6 equal parts?
 - Students should say $\frac{1}{6}$ of the whole pile.
- What would one pile of leaves equal if you divide the whole into 7 equal parts?
 - Students should say $\frac{1}{7}$ of the whole pile.

Adaptations:

- Provide the student with the fraction options.
- Draw the lines to separate the groups using leaves.
- Ask students how many 2 or 3 piles would represent.

Finished Product: Students will have a conversation about fraction parts of the whole.

