

Our Half-Birthday Party!

Summary

Students will learn about fractions, especially $\frac{1}{2}$, by participating in a Half-Birthday Party.

Main Core Tie

Mathematics Grade 2

[Strand: GEOMETRY \(2.G\) Standard 2.G.3](#)

Materials

Half-Birthday Party

- [Half-Birthday Party Invitation](#) (pdf)

Clown and nose with blindfold

Fraction Plates

Fraction plates

Bean Fractions

- [Bean Fractions](#) (pdf)

Beans (paint one side a different color)

Pizza Fractions

- [Pizza Fractions](#) (pdf)

Dice

Fraction Memory Game

- [Fraction Memory Game Pictures](#) (pdf)

- [Fraction Memory Game Symbols](#) (pdf)

Additional Resources

Books

- *Jump, Kangaroo, Jump!*
, by Stuart J. Murphy; ISBN 0-06-446721-X
- *Fabulous Fractions*
, by Lynette Long; ISBN 0471369810
- *Eating Fractions*
, by Bruce McMillan; ISBN 0-590-43771-2
- *Baker Bill*
, by Calvin Irons; ISBN 0-7327-1419-2
- *Give Me Half!*
, by Stuart J. Murphy; ISBN 0-06-446701-5

Background for Teachers

Students should have a basic understanding that a whole object is made up of parts. Students will learn about fractions (especially $\frac{1}{2}$) by participating in a Half-Birthday Party. They will do activities that teach fractions are part of a whole. The Half-Birthday Party is centered around the fraction $\frac{1}{2}$ and should be used as an introduction to fractions. Other activities using fractions may be used to illustrate different fractions.

Intended Learning Outcomes

1. Demonstrate a positive learning attitude.
5. Understand and use basic concepts and skills.

6. Communicate clearly in oral, artistic, written, and nonverbal form.

Instructional Procedures

Invitation to Learn

Let's have a "half" birthday party and do some activities to learn about fractions. Share the [Half-Birthday Story](#).

Instructional Procedures

Half-Birthday Party

Pin the "half-nose" on the "half-clown."

Students start with a whole circle nose and cut it into two parts, representing two parts make a whole. You could use a square and have students cut it into thirds or fourths as an extension.

Fraction Plates

This activity provides an opportunity to represent unit fractions of $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$ with visual objects, preparing students for the symbols.

Bean Fractions

This activity is a hands-on approach to helping students identify the parts needed to represent a whole object of $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$ (see *Bean Fractions* in the Materials section).

Pizza Fractions

This game can be played with two people or as a class divided into two teams.

Team 1 rolls the fraction dice and picks up a piece of pizza representing that fraction.

Team 2 then rolls the dice, repeating the steps.

A point is given to the team who places the last fraction piece, making a whole pizza.

If a 1 is rolled on the fraction dice, a whole pizza is "made" and the team receives one point.

Optional: Once a pizza is made, remove the pizza and re-use the pieces, making the pizza over again.

Fraction Memory Game

Using posterboard-size [Fraction Memory Game Pictures](#) and [Fraction Memory Game Symbols](#), play the *Fraction Memory Game* with class. Small sets may be used for small groups. This activity helps students recognize regions of geometric shapes. It helps them learn to match fraction pictures to corresponding fraction symbols.

Extensions

- *Spelling List*

: Create fractions using vowels and consonants.

Family Connections

Real-Life Fractions: Invite families to help students find and share examples of "real life fractions" (i.e., 6 out of 12 eggs equals $\frac{1}{2}$ dozen; the green light on a stop light represents $\frac{1}{3}$).

Family Fraction Fun: Student draws a picture of his/her family, including each member. Families help student find several fractions using different family attributes (i.e., $\frac{2}{4}$ of our family have brown eyes, $\frac{3}{4}$ of our family are girls, etc.).

Assessment Plan

- *Observational:*

During birthday party, observe students doing activities such as cutting circles or shapes into appropriate sections. Students can also be observed selecting a match for the *Fraction Memory Game*, discussing the fraction of colored beans with a friend, and selecting pieces of pizza for *Pizza Fractions*.

Authors

