Bean Bag Fraction Fun!

Lesson Overview

In this lesson, Albie will move from simple counting to understanding **fractions of a set**. By tossing bean bags and recording results, he will learn how to identify, write, and compare fractions in a hands-on, high-energy way.

Learning Objectives

By the end of this lesson, Albie will be able to:

- Identify the **denominator** as the total number of items in a group.
- Identify the **numerator** as the specific part of the group we are counting.
- Write a fraction to represent a real-world outcome (e.g., "3 out of 5 bags landed in the bucket").
- Compare two fractions with the same denominator to see which is larger.

Materials Needed

- 10 Bean bags (if you don’t have these, 10 pairs of rolled-up socks work perfectly!)
- A laundry basket, bucket, or a hula hoop target
- Masking tape or chalk (to mark a "toss line")
- A small whiteboard and marker (or paper and a clipboard)
- "Fraction Scorecard" (can be hand-drawn)

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1. Introduction: The Great Toss Challenge (The Hook)

Time: 5 Minutes

The Hook: "Albie, today you aren't just a student—you’re an athlete! But every great athlete needs a way to track their stats. If you throw 5 bags and land some in the bucket, how do we describe that score using math? We use fractions!"

The "Big Idea": Explain that a fraction is just a way to show "parts of a whole group." Today, our "whole group" is the total number of bean bags we throw.

2. Body: I Do, We Do, You Do

Time: 20 Minutes

Phase 1: I Do (Modeling)

Set the bucket about 5 feet away. Take 4 bean bags.

- **Show:** "I have 4 bags total. In fraction world, the total goes on the bottom. We call him the **Denominator** (think 'D' for 'Down')." Write a 4 under a fraction bar.
- **Action:** Toss the bags. Let's say 3 land in the bucket.
- **Explain:** "I made 3 in. That is my **Numerator**. He sits on top because he’s the 'number' we are counting." Write the 3 on top.
- **Result:** "My score is 3/4 (three-fourths)!"

Phase 2: We Do (Guided Practice)

Now, it's Albie's turn with help!

- Give Albie 6 bean bags. Ask: "What number goes on the bottom of our fraction?" (Answer: 6).
- Albie tosses the bags. Together, count how many landed *inside* the target.
- Ask Albie to write the fraction on the whiteboard.
- **Challenge:** "If 4/6 are *inside* the bucket, how many are *outside* the bucket?" Help him see that 2/6 are outside. Together, they make the whole set of 6!

Phase 3: You Do (Independent Practice)

The Fraction Circuit: Set up three "Stations" at different distances (Easy, Medium, Hard).

1. **Station 1 (Easy):** Toss 3 bags. Record the fraction of "Makes."
2. **Station 2 (Medium):** Toss 5 bags. Record the fraction of "Makes."
3. **Station 3 (Hard):** Toss 8 bags. Record the fraction of "Makes."

Albie must complete the circuit and bring his "Scorecard" back to show his stats.

3. Conclusion: The Stat Recap

Time: 5 Minutes

- **Summary:** "Look at your scorecard! You just wrote six different fractions."
- **Recap Question:** "If you have a fraction of 5/10, which number tells us how many bags we had in our hands at the start?" (The 10).
- **Takeaway:** Fractions aren't just in books; they are in every game we play, from basketball shots to pieces of a pizza!

Assessment (How do we know he got it?)

- **Formative:** During the "We Do" phase, can Albie correctly identify which number goes on top vs. bottom?
- **Summative:** At the end, show Albie a picture of 5 bean bags (3 red, 2 blue). Ask him to write the fraction of bags that are *red*. If he writes 3/5, he has mastered the concept!

Success Criteria

Albie will know he is successful if he can:

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1. Count the total items to find the bottom number.
2. Count the "target" items to find the top number.
3. Read his fraction out loud (e.g., "Two-fifths").

Differentiation & Adaptability

- **For an extra challenge:** Ask Albie to compare. "Which is a better score: 2/4 or 3/4?" Use the bean bags to visually show that 3/4 covers more of the set.
- **If he's struggling:** Stick to a total of 2 or 4 bags only. Use two different colors of socks (e.g., all white socks vs. all black socks) to make the "parts" easier to see.
- **Multi-Sensory:** Let him jump or clap for every bag that lands in the bucket to reinforce the counting of the numerator.