# 2-Week Group Intervention Plan

## Comparing Fractions (Grade 5)

Created: November 5, 2025

### Group Profile

**Number of Students:** 3 fifth graders

**Duration:** 15 minutes per day, 4 days per week, for 2 weeks (8 sessions total)

**Focus:** Comparing fractions with understanding of equivalence and magnitude

**Student Strengths:** Comfortable using area models to represent fractions

## Benchmark-Based Learning Goals

Based on the High Leverage Concepts (HLCs) and Grade 5 progressions, this intervention targets:

1. **Compose, decompose, and recompose using unit fractions and/or equivalence** to compare fractions
2. **Use visual representations** (area models, number lines, fraction bars) to build understanding of fraction magnitude and equivalence
3. **Apply understanding of equivalence** as a strategy to compare fractions with unlike denominators

**Download High Leverage Concepts (HLCs) Grades 3-5**

**Download ALN Grade 5 HLC Progressions**

# Week 1: Building Equivalence and Comparison Strategies

## Session 1 (Day 1): Exploring Fraction Relationships

### Launch (3 min)

Display the visual showing fractions: 4/12, 1/3, 1/4, and 3/12. Ask: "Find a relationship between two of these numbers. What is the relationship?" Guide students to notice that 4/12 and 1/3 are equivalent.

**Download Related Numbers Launch - Fractions #06**

### Main Activity (10 min)

Students work in partners to compare fractions using area models. Encourage multiple strategies: finding equivalent fractions, using benchmark fractions (1/2), or reasoning about the size of pieces. Have students share their thinking with the group.

**Download Grade 3 Task - Comparing Fractions #02**

### Closure (2 min)

Quick discussion: "What strategy helped you compare the fractions today?" Preview tomorrow's work: "We'll explore more fraction relationships using different models."

### Materials Needed:

- Related Numbers Reasoning Launch - Fractions #06 (visual)
- Grade 3 Task - Comparing Fractions #02 (task sheet)
- Paper for drawing area models

## Session 2 (Day 2): Deepening Equivalence Understanding

### Launch (3 min)

Display the 3×3 grid showing fractions with twelfths and 3/4. Ask students to find equivalent fractions (e.g., 9/12 = 3/4). Discuss: "How do you know these fractions are equivalent?"

**Download Related Numbers Launch - Fractions #26**

### Main Activity (10 min)

Students explore showing the same fraction using different denominators. This builds understanding that equivalent fractions occupy the same amount of space. Students use area models to justify their thinking.

**Download Grade 4 Task - Fraction Pieces #05**

### Closure (2 min)

Partner share: "Tell your partner one thing you learned about equivalent fractions today."

### Materials Needed:

- Related Numbers Reasoning Launch - Fractions #26 (visual)
- Grade 4 Task - Fraction Pieces #05 (task sheet)
- Area model templates or grid paper

## Session 3 (Day 3): Comparing with Visual Models

### Launch (3 min)

Show the number line with tick marks at 0, 1, and 2. Ask: "What fractions could be written under the tick marks? Explain your reasoning." This activates thinking about fraction magnitude on a number line.

**Download Visual Images Launch - Ordering Unit Fractions**

### Main Activity (10 min)

Students play in partners using Deck 1 (halves, fourths, eighths). They compare fractions using <, >, and = symbols. Encourage use of area models or reasoning about piece size.

**Download ALN Menu Game - Fraction Compare**

### Closure (2 min)

Strategy discussion: "What helped you decide which fraction was greater?"

### Materials Needed:

- Visual Images Launch - Ordering Unit Fractions (visual)
- ALN Menu Game - Fraction Compare (Deck 1)
- Cardstock strips and brass fasteners for comparison symbols

## Session 4 (Day 4): Extending Comparison Strategies

### Launch (3 min)

Display fractions including 4/6, 1/3, 2/6, 8/12, and 4/3. Students identify relationships and equivalent fractions. Discuss improper fractions (4/3) and how they compare to proper fractions.

**Download Related Numbers Launch - Fractions #22**

### Main Activity (10 min)

Continue playing Fraction Compare, now using Deck 2 (thirds, sixths, twelfths). This increases complexity with different denominators. Students record their comparisons and reasoning.

**Download ALN Menu Game - Fraction Compare**

### Closure (2 min)

Reflection: "What's one strategy you used today that you didn't use earlier this week?"

### Materials Needed:

- Related Numbers Reasoning Launch - Fractions #22 (visual)
- ALN Menu Game - Fraction Compare (Deck 2)

# Week 2: Applying and Extending Comparison Skills

## Session 5 (Day 5): Strategic Comparison

### Launch (3 min)

Show number lines divided into halves, fourths, and eighths. Ask: "What do you notice? What do you wonder?" Guide students to see how different fractions relate on the same number line.

**Download Visual Images Launch - Fraction Number Lines #02**

### Main Activity (10 min)

Students roll a die and strategically place digits to create the largest (or smallest) fraction. This requires deep understanding of how numerators and denominators affect fraction size. After each round, students compare their fractions and explain their reasoning.

**Download ALN Menu Game - Trash Can Fractions**

### Closure (2 min)

Strategy share: "What did you think about when deciding where to place each digit?"

### Materials Needed:

- Visual Images Launch - Fraction Number Lines #02 (visual)
- ALN Menu Game - Trash Can Fractions (game sheet)
- One die (1-6)
- Recording sheets

## Session 6 (Day 6): Comparing with Multiple Strategies

### Launch (3 min)

Show the target with fractions from 1/12 to 5/6. Ask: "What do you notice? What do you wonder?" Discuss how fractions are ordered from smallest (outer ring) to largest (bullseye).

**Download Visual Images Launch - Fraction Target**

### Main Activity (10 min)

Students play using Recording Sheet A. They create fractions that meet specific criteria (greater than 1/2, less than 1/2, equivalent to 1/2, etc.). This requires comparing fractions to benchmarks.

**Download ALN Menu Game - Fraction Golf**

### Closure (2 min)

Quick discussion: "Which round was easiest? Which was hardest? Why?"

### Materials Needed:

- Visual Images Launch - Fraction Target (visual)
- ALN Menu Game - Fraction Golf (Recording Sheet A)
- Two dice per student

## Session 7 (Day 7): Advanced Comparison

### Launch (3 min)

Quick review: Display two fractions (e.g., 5/8 and 2/3). Ask students to compare using any strategy. Share multiple approaches.

### Main Activity (10 min)

Continue playing Fraction Golf, now using Recording Sheet B (more complex criteria). Students compare fractions to 1/6, 1/4, 1/3, 2/3, and 3/4. Encourage use of area models, number lines, or equivalence reasoning.

**Download ALN Menu Game - Fraction Golf**

### Closure (2 min)

Reflection: "How has your thinking about comparing fractions changed over the past two weeks?"

### Materials Needed:

- ALN Menu Game - Fraction Golf (Recording Sheet B)
- Two dice per student
- Optional: fraction bars or area model templates

## Session 8 (Day 8): Assessment and Celebration

### Launch (3 min)

Revisit the number line visual from Session 5. Ask students to place additional fractions on the lines. Discuss how their understanding has grown.

**Download Visual Images Launch - Fraction Number Lines #02**

### Main Activity (10 min)

Students write their own comparison problems. They solve and justify their thinking using models. Students share their problems with the group.

**Download Grade 5 Task - Writing Problems**

### Closure (2 min)

Celebration and reflection: "What's one thing you're proud of learning about comparing fractions?" "What would you like to keep practicing?"

### Materials Needed:

- Visual Images Launch - Fraction Number Lines #02 (visual)
- Grade 5 Task - Writing Problems (task sheet)
- Paper for student-created problems

# Assessment Strategies

## Method 1: Observation Checklist

During each session, observe and note which students:

- Use area models effectively to compare fractions
- Identify equivalent fractions accurately
- Apply benchmark fractions (1/2, 1, etc.) to reason about magnitude
- Explain their comparison strategies clearly
- Transition from area models to other representations (number lines, reasoning about piece size)

### Progress Tracking Table

| Student Name | Uses Area Models | Identifies Equivalence | Uses Benchmarks | Explains Clearly |
|---|---|---|---|---|
| Student 1: _____ | ☐ | ☐ | ☐ | ☐ |
| Student 2: _____ | ☐ | ☐ | ☐ | ☐ |
| Student 3: _____ | ☐ | ☐ | ☐ | ☐ |

## Method 2: Exit Ticket (End of Week 2)

Present two comparison problems:

1. Compare 3/4 and 5/6. Which is greater? Show your thinking using a model.
2. Order these fractions from least to greatest: 2/3, 5/12, 3/4, 1/2. Explain your reasoning.

### Mastery Criteria:

- Student correctly compares fractions using visual models or equivalence
- Student explains reasoning clearly
- Student can order multiple fractions accurately

# Differentiation Notes

## Building on Strengths

- Since students are comfortable with area models, start there and gradually introduce number lines and reasoning about piece size
- Use the visual launches to activate prior knowledge before each activity
- Encourage students to draw their own area models to support comparison

## For Students Who Need More Support

- Provide pre-drawn area model templates
- Start with comparing fractions to benchmarks (1/2, 1) before comparing two non-benchmark fractions
- Use fraction bars or manipulatives alongside area models

## For Students Ready for Challenge

- Introduce comparing fractions with larger denominators
- Challenge them to compare without drawing models (mental reasoning)
- Have them create their own comparison problems for peers

# Complete Materials List

## Visual Launches

**Related Numbers Launch - Fractions #06**

**Related Numbers Launch - Fractions #26**

Related Numbers Launch - Fractions #22

Visual Images Launch - Ordering Unit Fractions

Visual Images Launch - Fraction Number Lines #02

Visual Images Launch - Fraction Target

## Tasks

Grade 3 Task - Comparing Fractions #02

Grade 4 Task - Fraction Pieces #05

Grade 5 Task - Writing Problems

## Games

ALN Menu Game - Fraction Compare

ALN Menu Game - Trash Can Fractions

ALN Menu Game - Fraction Golf

## Benchmark Documents

- High Leverage Concepts (HLCs) Grades 3-5
- ALN Grade 5 HLC Progressions

## Additional Materials

- Grid paper or area model templates
- Fraction bars (optional)
- Dice (1-6)
- Cardstock strips and brass fasteners (for Fraction Compare game)
- Chart paper for recording strategies