

LESSON PLAN

Cedar Hollow Slice Shop

Ms. Delgado · Cedar Hollow Elementary

Subject	Math
Grade	4
Time	45 minutes
Levels	Support, On Level, Challenge

OVERVIEW

Students run the Cedar Hollow Slice Shop: they cut fair slices, serve equivalent fractions, and compare, add, and take away fractions. After a short model, each student plays at the Support, On Level, or Challenge level, then completes the matching worksheet.

OBJECTIVES

- Support: tell whether slices are equal and name halves, thirds, and fourths.
- On Level: explain and generate equivalent fractions with models and by multiplying.
- Challenge: compare fractions (benchmarks or common denominators) and add or take away like denominators.

VOCABULARY

Numerator: the top number; parts counted.

Denominator: the bottom number; equal parts in a whole.

Equivalent fractions: same amount, like $\frac{1}{2}$ and $\frac{2}{4}$.

Benchmark fraction: a known fraction, like $\frac{1}{2}$.

Like denominators: same bottom number: $\frac{3}{8}$, $\frac{2}{8}$.

Mixed number: a whole and a fraction: $1\frac{3}{8}$.

SUCCESS CRITERIA

- I can tell if slices are equal and name $\frac{1}{2}$, $\frac{1}{3}$, or $\frac{1}{4}$.
- I can show two fractions are equivalent with a model or by multiplying.
- I can compare two fractions and explain which is greater.
- I can add like fractions and write $\frac{5}{4}$ as $1\frac{1}{4}$.

MATERIALS

- The game (file or link), one device per student or pair
- Intro slides and the three leveled worksheets
- Paper circles, pencils, and a red colored pencil
- Exit ticket slips

LESSON SEQUENCE

TIME	SEGMENT	WHAT HAPPENS
5 min	Hook	Slide 2: vote on which pans show fourths. Fold a paper circle into fourths.
8 min	Model	Slides 3 to 6: target, vocabulary, and worked examples.
4 min	Quick check	Slide 7 confirms each student's level. Slide 8 shows codes and how to submit.
12 min	Game	Students run the shop at their level. Ask students to explain an order.
12 min	Worksheet	Leveled worksheet. Pull a small group with paper circles if needed.
4 min	Exit ticket	Slide 9: completion code, one leveled question, and the I can statement met.
45 min	Total	

DELIVERING THE GAME

Example class codes (same code, same game for the whole class):

DEL4-1 Support **DEL4-2** On Level **DEL4-3** Challenge

- Post the game in Canvas, in Google Classroom (Google Sites embed), or on your class website.
- Give each group its level's code. The suffix (-1, -2, -3) sets the level; the same code gives the same questions.
- Students type their completion code into the Canvas or Google Classroom assignment.
- Teacher screen passphrase: **sunny garden** (tap the small "Made by GBG Education" credit 5 times to open the teacher screen and check completion codes).

DIFFERENTIATION

Level 1: Support

Game: fair cuts and orders in halves to eighths with pictures, hints, and a second try. Worksheet: large print, word banks, shading. Uses the **below-grade prerequisite** 2.G.A.3.

Level 2: On Level

Game: equivalent orders ($\frac{3}{4} = \frac{6}{8}$), comparing, and adding, with hints. Worksheet: pie models, missing numbers, compare, add (4.NF.A.1).

Level 3: Challenge

Game: mixed numbers, compare, add, take away, no hints. Worksheet: $>$, $=$, $<$, mixed numbers, sums (4.NF.A.2, 4.NF.B.3d).

ACCOMMODATIONS

- Read-aloud button in the game (where supported).
- Large-print Support worksheet and paper strips for anyone.
- ELs: a partner, posted vocabulary, and drawn answers.

ASSESSMENT

Completion codes show each score by level on the teacher screen. The answer key, explain items, exit ticket, and quick check set each student's level next time.

OBSERVATION READY

DANIELSON FRAMEWORK FOR TEACHING (2022) ALIGNMENT

- **1c Setting Instructional Outcomes** (Domain 1: Planning and Preparation): Leveled objectives come from 4.NF.A.1, 4.NF.A.2, 4.NF.B.3a, and 4.NF.B.3d, with a named prerequisite for Support.
- **1f Designing and Analyzing Assessments** (Domain 1: Planning and Preparation): Quick check, completion codes, leveled worksheets with keys, and an exit ticket match each objective.
- **3a Communicating About Purpose and Content** (Domain 3: Learning Experiences): Target and success criteria are posted; the teacher models each skill with labeled visuals.
- **3d Using Assessment for Learning** (Domain 3: Learning Experiences): Instant game feedback; the teacher circulates and checks codes.
- **3e Responding Flexibly to Student Needs** (Domain 3: Learning Experiences): Quick check results move students between levels (code suffix) or into a small group.

RESEARCH-BASED STRATEGIES

- **Gaming in Math:** a three-level fraction game with scoring and a completion code.
- **Feedback:** each game answer shows right or wrong with a short reason; Levels 1 and 2 add hints.
- **Worked examples:** slides 5 and 6 model equivalence, comparing, and adding before practice.

STANDARDS ALIGNMENT

- **2.G.A.3** (CCSS Math): Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.
- **4.NF.A.1** (CCSS Math): Explain why a fraction $\frac{a}{b}$ is equivalent to a fraction $\frac{n \times a}{n \times b}$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.
- **4.NF.A.2** (CCSS Math): Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.
- **4.NF.B.3a** (CCSS Math): Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
- **4.NF.B.3d** (CCSS Math): Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

Observation Ready section: Danielson Framework for Teaching (2022). Other frameworks available on request.