

Title of Book: Fractions in Disguise
Author: Edward Einhorn
Publisher/Year: Charlesbridge/2014
ISBN: 978-1570917745

Grade Levels for Recommended Use: 3rd

TEKS:

3.3 Number and operations. The student applies mathematical process standards to represent and explain fractional units. The student is expected to:

(F) represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using a variety of objects and pictorial models, including number lines;

Brief Summary: When a valuable fraction goes missing, George Cornelius Factor (a.k.a. GCF) vows to track it down. Knowing that the villainous Dr. Brok likes to disguise his ill-gotten fractions, G.C.F. invents a Reducer—half ray gun, half calculator— that strips away the disguise, reducing the fraction to its lowest common denominator and revealing its true form. With the Reducer in hand, George seeks out Dr. Brok in hopes of retrieving the missing fraction

Materials needed:

- 5 sets of equivalent fractions (10 cards total for each set)
- Paper
- Pencils

Suggested Activity:

1. Share "Fractions in Disguise" YouTube read-aloud with class
2. Have a short discussion asking students what they noticed in the story
3. Split students into groups of 2-3 depending on numbers
4. Pass out card sets, paper, and pencils to each group
5. Teach mini-lesson on finding equivalent fractions - simplifying and butterfly/cross-multiply methods
6. Instruct groups:
 - A. Shuffle cards face down

- B. Flip over 2 cards at a time
- C. Find matches of equivalent fractions and show work using taught methods
- 7. Circulate to listen to discussions and interactions. Ask guiding questions.
- 8. When all/most groups have finished, reconvene whole class
- 9. Lead final discussion asking about their experience with the activity and what they learned

Reference:

Einhorn, E., & Clark, D. (2014). Fractions in disguise a math adventure. Charlesbridge. New Minds Learning Center. (2022, August 3). Math Read Aloud: Fractions in Disguise [Video]. Youtube.
https://www.youtube.com/watch?v=JC_OAvfkUeE

Adapted by: Rebecca Westbrook (2023)

$\frac{1}{2}$	$\frac{5}{10}$
$\frac{1}{3}$	$\frac{2}{6}$
$\frac{1}{4}$	$\frac{4}{16}$
$\frac{1}{6}$	$\frac{3}{18}$
$\frac{1}{8}$	$\frac{3}{24}$

Table 1: Example Card Set