

FRACTIONS

Volume 38
Part 1

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Grades 3-5

FRACTION
TOWER TASK
CARDS INCLUDED

Card 14:

Use 9 Unifix® Cubes to build a tower that is $\frac{2}{9}$ Red, $\frac{3}{9}$ Orange, $\frac{1}{9}$ Yellow, and the rest Brown.

Fraction Tower Task Cards

Card 30:

Use 24 Unifix® Cubes to build a tower that is $\frac{1}{4}$ Blue, $\frac{1}{8}$ Yellow, $\frac{5}{8}$ Black, and the rest Orange.

Task Cards

Card 5:

Use 10 Unifix® Cubes to build a tower that is $\frac{7}{10}$ Black, $\frac{1}{10}$ Yellow, and $\frac{2}{10}$ Blue.

Fraction Tower Task Cards

Content

Each set of task cards provide independent or small group fraction practice using Unifix® Cubes. Each set includes introductory examples that set students up to be successful in each independent task. The first set of cards asks students to create a Unifix® Cube tower using a specific set of fraction rules. The second set of cards asks students to determine use Unifix® Cubes to determine three fractions that are equivalent to a given fraction.

Prior to the lesson, task cards need to be cut out. You may also want to laminate them to use over and over.

Objectives

Students will...

- Be able to build Unifix® Cube towers from specific instructions
- Be able to discuss fractional relationships using manipulatives

Materials

- Unifix® Cubes Set of 3,000 — TB21918
- Unifix® Cubes Set of 1,000 — TB11561
- Unifix® Cubes Set of 100 — TB11548

Students will need access to a variety of colors of Unifix® Cubes. For each task card, they will need no more than 10 of any given color.

Common Core State Standards

CCSS.MATH.CONTENT.3.NF.A.1 — Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.

INTRODUCTORY EXAMPLE:

Create a tower of Unifix® Cubes. Include 2 red cubes, 2 black cubes and 1 white cube.

Ask students how many total cubes are in your tower. (5)

Explain that is the denominator of the fraction because that's whole or total number of Unifix® Cubes.

- How many cubes are red? (2) Explain that will be the numerator of the fraction because that's the part of the whole.
- What fraction of the tower is red? ($\frac{2}{5}$)
- How many cubes are white? (1)
- What fraction of the tower is white? ($\frac{1}{5}$)
- How many cubes are black? (2)
- What fraction of the tower is black? ($\frac{2}{5}$)
- How many cubes are orange? (0)
- What fraction of the tower is orange? ($\frac{0}{5}$)



Fraction Tower Task Cards (pgs. 3-12)

The difficulty of the task increases as the number on the card increases.

Cards 1-10: Introductory cards. They give all needed details and only use fractions with like denominators.

Cards 11-15: Also use fractions with only like denominators, but students need to determine how many of one color of Unifix® Cubes are needed.

Cards 16-20: Give all the needed information and use fractions with both like and unlike denominators.

Cards 21-30: Use fractions with unlike denominators and ask students to determine how many of one color of Unifix® Cubes are needed

INTERVENTION

- Students can start by building towers with 2–5 Unifix® Cubes. Limit the number of block colors to 2.
- Students can write out addition sentences to help them recognize that the sum of all Unifix® Cube towers will always be 1.
 $\frac{1}{6} + \frac{2}{6} + \frac{3}{6} = \frac{6}{6}$ (1)

EXTENSION

- Students can create their own task cards and ask a friend to solve. Blank task cards are included at the end of the lesson.
- Students can grab a handful of Unifix® Cubes and write a task card that applies to the amount of cubes they've pulled.

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