



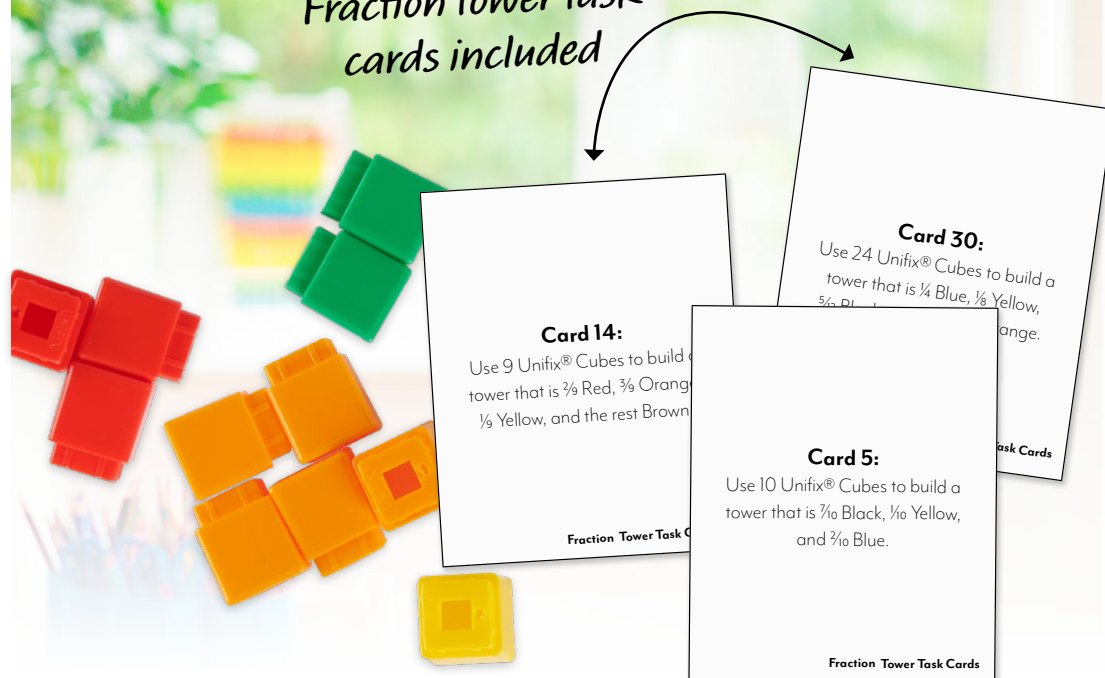
Developed with Kristin Hotter

Volume 38 | Gr. 3-5

Part 1

# Fractions

Fraction tower task cards included



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



## Content

Each set of task cards provide independent or small group fraction practice using Unifix<sup>®</sup> 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<sup>®</sup> Cube tower using a specific set of fraction rules. The second set of cards asks students to determine use Unifix<sup>®</sup> 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.**

## Materials list

- Unifix<sup>®</sup> Cubes Set of 3,000 (TB21918)
- Unifix<sup>®</sup> Cubes Set of 1,000 (TB11561)
- Unifix<sup>®</sup> Cubes Set of 100 (TB11548)

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

## Objectives

Students will...

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

## 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 (pp. 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.

# Fraction Tower Task Cards 1–9

Cut these task cards out prior to starting lesson. You may also want to laminate them to use over and over.

## Card 1:

Use 6 Unifix® Cubes to build a tower that is  $\frac{1}{6}$  Yellow,  $\frac{2}{6}$  Blue, and  $\frac{3}{6}$  Red.

Fraction Tower Task Cards

## Card 4:

Use 9 Unifix® Cubes to build a tower that is  $\frac{3}{9}$  Red,  $\frac{1}{9}$  Orange, and  $\frac{5}{9}$  Yellow.

Fraction Tower Task Cards

## Card 7:

Use 12 Unifix® Cubes to build a tower that is  $\frac{3}{12}$  Red,  $\frac{1}{12}$  Orange,  $\frac{2}{12}$  Yellow,  $\frac{1}{12}$  Green,  $\frac{3}{12}$  Blue, and  $\frac{2}{12}$  Purple.

Fraction Tower Task Cards

## Card 2:

Use 7 Unifix® Cubes to build a tower that is  $\frac{3}{7}$  Red,  $\frac{2}{7}$  Purple, and  $\frac{2}{7}$  Black.

Fraction Tower 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

## Card 8:

Use 13 Unifix® Cubes to build a tower that is  $\frac{2}{13}$  Black,  $\frac{3}{13}$  Brown,  $\frac{5}{13}$  Red,  $\frac{1}{13}$  White, and  $\frac{2}{13}$  Orange.

Fraction Tower Task Cards

## Card 3:

Use 8 Unifix® Cubes to build a tower that is  $\frac{2}{8}$  Green,  $\frac{3}{8}$  Black,  $\frac{1}{8}$  Orange, and  $\frac{2}{8}$  Purple.

Fraction Tower Task Cards

## Card 6:

Use 11 Unifix® Cubes to build a tower that is  $\frac{3}{11}$  Green,  $\frac{1}{11}$  Orange,  $\frac{5}{11}$  Blue, and  $\frac{2}{11}$  Red.

Fraction Tower Task Cards

## Card 9:

Use 14 Unifix® Cubes to build a tower that is  $\frac{4}{14}$  Orange,  $\frac{5}{14}$  Yellow,  $\frac{1}{14}$  Blue,  $\frac{1}{14}$  Purple, and  $\frac{3}{14}$  White.

Fraction Tower Task Cards

# Fraction Tower Task Cards 10–18

Cut these task cards out prior to starting lesson. You may also want to laminate them to use over and over.

## Card 10:

Use 15 Unifix® Cubes to build a tower that is  $\frac{2}{15}$  Red,  $\frac{6}{15}$  Black,  $\frac{4}{15}$  Yellow,  $\frac{1}{15}$  Orange,  $\frac{1}{15}$  Green, and  $\frac{1}{15}$  Purple.

Fraction Tower Task Cards

## Card 13:

Use 8 Unifix® Cubes to build a tower that is  $\frac{1}{8}$  Orange,  $\frac{3}{8}$  Purple,  $\frac{1}{8}$  White, and the rest Black.

Fraction Tower Task Cards

## Card 16:

Use 8 Unifix® Cubes to build a tower that is  $\frac{1}{4}$  Purple,  $\frac{1}{4}$  Brown,  $\frac{3}{8}$  Red, and  $\frac{1}{8}$  Blue.

Fraction Tower Task Cards

## Card 11:

Use 6 Unifix® Cubes to build a tower that is  $\frac{1}{6}$  Blue,  $\frac{2}{6}$  White, and the rest Red.

Fraction Tower Task Cards

## 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 17:

Use 10 Unifix® Cubes to build a tower that is  $\frac{1}{2}$  Orange,  $\frac{1}{5}$  Blue, and  $\frac{3}{10}$  Brown.

Fraction Tower Task Cards

## Card 12:

Use 7 Unifix® cues to build a tower that is  $\frac{2}{7}$  Black,  $\frac{3}{7}$  Green, and the rest Yellow.

Fraction Tower Task Cards

## Card 15:

Use 10 Unifix® Cubes to build a tower that is  $\frac{1}{10}$  Red,  $\frac{2}{10}$  Orange,  $\frac{2}{10}$  Yellow,  $\frac{1}{10}$  Green,  $\frac{1}{10}$  Blue, and the rest Purple.

Fraction Tower Task Cards

## Card 18:

Use 12 Unifix® Cubes to build a tower that is  $\frac{1}{3}$  Blue,  $\frac{1}{4}$  White, and  $\frac{5}{12}$  Black.

Fraction Tower Task Cards

# Fraction Tower Task Cards 19–27

Cut these task cards out prior to starting lesson. You may also want to laminate them to use over and over.

## Card 19:

Use 16 Unifix® Cubes to build a tower that is  $\frac{3}{8}$  White,  $\frac{1}{8}$  Brown, and  $\frac{1}{2}$  Red.

Fraction Tower Task Cards

## Card 22:

Use 8 Unifix® Cubes to build a tower that is  $\frac{1}{8}$  Orange,  $\frac{3}{4}$  Yellow, and the rest Blue.

Fraction Tower Task Cards

## Card 25:

Use 10 Unifix® Cubes to build a tower that is  $\frac{1}{2}$  Green,  $\frac{3}{5}$  Blue, and the rest White.

Fraction Tower Task Cards

## Card 20:

Use 18 Unifix® Cubes to build a tower that is  $\frac{1}{3}$  Yellow,  $\frac{1}{6}$  Blue,  $\frac{2}{9}$  Green, and  $\frac{5}{18}$  Black.

Fraction Tower Task Cards

## Card 23:

Use 10 Unifix® Cubes to build a tower that is  $\frac{1}{5}$  Black,  $\frac{1}{2}$  Red, and the rest White.

Fraction Tower Task Cards

## Card 26:

Use 15 Unifix® Cubes to build a tower that is  $\frac{1}{3}$  Blue,  $\frac{1}{5}$  Black,  $\frac{4}{15}$  Orange, and the rest Green.

Fraction Tower Task Cards

## Card 21:

Use 6 Unifix® Cubes to build a tower that is  $\frac{1}{3}$  Blue and the rest White.

Fraction Tower Task Cards

## Card 24:

Use 12 Unifix® Cubes to build a tower that is  $\frac{3}{4}$  Blue,  $\frac{1}{6}$  Yellow, and the rest Brown.

Fraction Tower Task Cards

## Card 27:

Use 18 Unifix® Cubes to build a tower that is  $\frac{5}{9}$  Yellow and the rest Brown.

Fraction Tower Task Cards

## Fraction Tower Task Cards 28–30

Cut these task cards out prior to starting lesson. You may also want to laminate them to use over and over.

### Card 28:

Use 20 Unifix® Cubes to build a tower that is  $\frac{1}{4}$  White,  $\frac{2}{5}$  Blue,  $\frac{3}{10}$  Red, and the rest Black.

Fraction Tower Task Cards

### Card 29:

Use 24 Unifix® Cubes to build a tower that is  $\frac{1}{6}$  Brown,  $\frac{3}{8}$  Orange,  $\frac{1}{2}$  Yellow, and the rest Green.

Fraction Tower Task Cards

### Card 30:

Use 24 Unifix® Cubes to build a tower that is  $\frac{1}{4}$  Blue,  $\frac{1}{8}$  Yellow,  $\frac{5}{12}$  Black, and the rest Orange.

Fraction Tower Task Cards

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Card 1:**

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ red cubes.

**Card 5:**

I used \_\_\_\_\_ black cubes.

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ blue cubes.

**Card 9:**

I used \_\_\_\_\_ orange cubes.

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ purple cubes.

I used \_\_\_\_\_ white cubes.

**Card 2:**

I used \_\_\_\_\_ red cubes.

I used \_\_\_\_\_ purple cubes.

I used \_\_\_\_\_ black cubes.

**Card 6:**

I used \_\_\_\_\_ green cubes.

I used \_\_\_\_\_ orange cubes.

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ red cubes.

**Card 10:**

I used \_\_\_\_\_ red cubes.

I used \_\_\_\_\_ black cubes.

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ orange cubes.

I used \_\_\_\_\_ green cubes.

I used \_\_\_\_\_ purple cubes.

**Card 3:**

I used \_\_\_\_\_ green cubes.

I used \_\_\_\_\_ black cubes.

I used \_\_\_\_\_ orange cubes.

I used \_\_\_\_\_ purple cubes.

**Card 7:**

I used \_\_\_\_\_ red cubes.

I used \_\_\_\_\_ orange cubes.

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ green cubes.

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ purple cubes.

**Card 11:**

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ white cubes.

I used \_\_\_\_\_ red cubes.

**Card 4:**

I used \_\_\_\_\_ red cubes.

I used \_\_\_\_\_ orange cubes.

I used \_\_\_\_\_ yellow cubes.

**Card 8:**

I used \_\_\_\_\_ black cubes.

I used \_\_\_\_\_ brown cubes.

I used \_\_\_\_\_ red cubes.

I used \_\_\_\_\_ white cubes.

I used \_\_\_\_\_ orange cubes.

**Card 12:**

I used \_\_\_\_\_ black cubes.

I used \_\_\_\_\_ green cubes.

I used \_\_\_\_\_ yellow cubes.

# Unifix® tower worksheet cont.

## Card 13:

I used \_\_\_\_\_ orange cubes.

I used \_\_\_\_\_ purple cubes.

I used \_\_\_\_\_ white cubes

I used \_\_\_\_\_ black cubes.

## Card 17:

I used \_\_\_\_\_ orange cubes.

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ brown cubes.

## Card 21:

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ white cubes.

## Card 14:

I used \_\_\_\_\_ red cubes.

I used \_\_\_\_\_ orange cubes.

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ brown cubes.

## Card 18:

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ white cubes.

I used \_\_\_\_\_ black cubes.

## Card 22:

I used \_\_\_\_\_ orange cubes.

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ blue cubes.

## Card 15:

I used \_\_\_\_\_ red cubes.

I used \_\_\_\_\_ orange cubes.

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ brown cubes.

## Card 19:

I used \_\_\_\_\_ white cubes.

I used \_\_\_\_\_ brown cubes.

I used \_\_\_\_\_ red cubes

## Card 23:

I used \_\_\_\_\_ white cubes.

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ red cubes.

## Card 16:

I used \_\_\_\_\_ purple cubes.

I used \_\_\_\_\_ brown cubes.

I used \_\_\_\_\_ red cubes.

I used \_\_\_\_\_ blue cubes.

## Card 20:

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ green cubes.

I used \_\_\_\_\_ black cubes.

## Card 24:

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ brown cubes.



# Unifix® tower worksheet cont.

## Card 25:

I used \_\_\_\_\_ green cubes.

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ white cubes.

## Card 27:

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ brown cubes.

## Card 29:

I used \_\_\_\_\_ brown cubes.

I used \_\_\_\_\_ orange cubes.

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ green cubes.

## Card 26:

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ black cubes.

I used \_\_\_\_\_ orange cubes.

I used \_\_\_\_\_ green cubes.

## Card 28:

I used \_\_\_\_\_ white cubes.

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ red cubes.

I used \_\_\_\_\_ black cubes.

## Card 30:

I used \_\_\_\_\_ blue cubes.

I used \_\_\_\_\_ yellow cubes.

I used \_\_\_\_\_ black cubes.

I used \_\_\_\_\_ orange cubes.

<p><b>Card 1:</b> 1 Yellow, 2 Blue, and 3 Red</p>	<p><b>Card 2:</b> 2 Red, 2 Purple, and 3 Black</p>	<p><b>Card 3:</b> 2 Green, 3 Black, 1 Orange, and 2 Purple</p>	<p><b>Card 4:</b> 3 Red, 1 Orange, and 5 Yellow</p>
<p><b>Card 5:</b> 7 Black, 1 Yellow and 2 Blue</p>	<p><b>Card 6:</b> 3 Green, 1 Orange, 5 Blue, and 2 Red</p>	<p><b>Card 7:</b> 3 Red, 1 Orange, 2 Yellow, 1 Green, 3 Blue, and 2 Purple</p>	<p><b>Card 8:</b> 2 Black, 3 Brown, 5 Red, 1 White, and 2 Orange</p>
<p><b>Card 9:</b> 4 Orange, 5 Yellow, 1 Blue, 1 Purple, and 3 White</p>	<p><b>Card 10:</b> 2 Red, 6 Black, 4 Yellow, 1 Orange, 1 Green, and 1 Purple</p>	<p><b>Card 11:</b> 1 Blue, 2 White, and 3 Red</p>	<p><b>Card 12:</b> 2 Black, 3 Green, and 2 Yellow</p>
<p><b>Card 13:</b> 1 Orange, 3 Purple, 1 White, 3 Black</p>	<p><b>Card 14:</b> 2 Red, 3 Orange, 1 Yellow, and 3 Brown</p>	<p><b>Card 15:</b> 1 Red, 2 Orange, 2 Yellow, 1 Green, 1 Blue, and 3 Purple</p>	<p><b>Card 16:</b> 2 Purple, 2 Brown, 3 Red, and 1 Blue</p>
<p><b>Card 17:</b> 5 Orange, 2 Blue, and 3 Brown</p>	<p><b>Card 18:</b> 4 Blue, 3 White, and 5 Black</p>	<p><b>Card 19:</b> 6 White, 2 Brown, and 8 Red</p>	<p><b>Card 20:</b> 6 Yellow, 3 Blue, 4 Green, and 5 Black</p>
<p><b>Card 21:</b> 2 Blue and 4 White</p>	<p><b>Card 22:</b> 1 Orange, 6 Yellow, and 1 Blue</p>	<p><b>Card 23:</b> 3 White, 3 Blue, 1 Yellow, and 2 Red</p>	<p><b>Card 24:</b> 8 Blue, 2 Yellow, and 2 Brown</p>
<p><b>Card 25:</b> 5 Green, 4 Blue, and 1 White</p>	<p><b>Card 26:</b> 5 Blue, 3 Black, 4 Orange, and 3 Green</p>	<p><b>Card 27:</b> 10 Yellow and 8 Brown</p>	<p><b>Card 28:</b> 5 White, 8 Blue, 6 Red, and 1 Black</p>
<p><b>Card 29:</b> 4 Brown, 9 Orange, 2 Yellow, and 9 Green</p>	<p><b>Card 30:</b> 6 Blue, 3 Yellow, 10 Black, and 5 Orange</p>		

**Blank Task Cards:** Students can use these to create their own Fraction Tower Task Cards.

Use \_\_\_\_\_ Unifix® Cubes  
to build a tower that is

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Use \_\_\_\_\_ Unifix® Cubes  
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# Blank Task Cards

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