# COMBATING POVERTY & MICROLOANS
## FRACTION EDITION

| **Ideal Unit**: Fractions | **Time Range**: 3-4 Days | **Supplies**: Pencil & Paper |
|---|---|---|

**Topics of Focus:**

- Adding and Subtracting Fractions with Like Denominators
- Equivalent Fractions
- Fraction Models
- Fraction of a Number

**Driving Question** *"What would our world look like if we shrunk our 7 billion people down to a village of just 100?"*

**Culminating Experience** Describe microlending to your followers in a blogpost

**Common Core Alignment:**

| | |
|---|---|
| 4.NF.A.1 | Explain why a fraction a ⁄ b is equivalent to a fraction ( n × a )⁄( n × 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.B.3a | Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. |
| 4.NF.B.4c | Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. |
| 4.NF.C.5 | Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. |

**Procedures:**

A.) In "If the World Were a Village", students will add and subtract fractions to shrink the global population down to 100 people. Afterward, have a class discussion of the most surprising findings. The results of this assignment will likely get students talking.

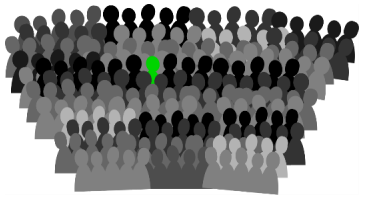
B.) In "More Global Facts", students will use equivalent fractions to get the global statistics to be out of a denominator of 100. This can be used together with the first or separately.

C.) In "Microlending", students will have four different people that are attempting to get funded. They use fraction models and will determine how much more they need to raise.

D.) In "Microlending Blog Post", students are asked to synthesize what they've learned and share with the world. **Optional** Make a microloan as a class to an applicant on Kiva.org.

* Aspects of the project can be completed independently. The entire project does not need to be completed to have a great learning experience, though it is suggested because it will best scaffold the skills and context.

# IF THE WORLD WERE A VILLAGE OF 100 PEOPLE...



Name _____ Date _____

The world's population keeps growing. Now there are more than 7 billion people in the world. But what if the world were a village of just 100 people? Knowing the fractions of the world's population, we can find out a lot about it. If the world were just one village, who would be in it?

Add or subtract the fractions to find the missing information.

## Gender

| | Fraction of Population | if the world were 100 people... |
|---|---|---|
| Male | $\frac{50}{100}$ | 50 |
| Female | | |

## Age

| | Fraction of Population | if the world were 100 people... |
|---|---|---|
| Age 0-14 | | |
| Age 15-64 | $\frac{66}{100}$ | |
| Age 65+ | $\frac{8}{100}$ | |

## Dwelling

| | Fraction of Population | if the world were 100 people... |
|---|---|---|
| Cities | | |
| Rural | $\frac{49}{100}$ | |

## Geography

| | Fraction of Population | if the world were 100 people...) |
|---|---|---|
| Asia | $\frac{60}{100}$ | |
| Africa | $\frac{15}{100}$ | |
| Europe | $\frac{11}{100}$ | |
| Latin America | $\frac{9}{100}$ | |
| U.S. & Canada | | |

## Religion

| | Fraction of Population | if the world were 100 people... |
|---|---|---|
| Christian | | |
| Muslim | $\frac{22}{100}$ | |
| Hindu | $\frac{14}{100}$ | |
| Buddhist | $\frac{7}{100}$ | |
| Other Religion | $\frac{12}{100}$ | |
| No Religion | $\frac{12}{100}$ | |

## Literacy

| | Fraction of Population | if the world were 100 people... |
|---|---|---|
| Can read and write | $\frac{8}{10}$ | |
| Cannot read and write | | |

## Drinking Water

| | Fraction of Population | if the world were 100 people...) |
|---|---|---|
| Access to safe drinking water | | |
| Unsafe drinking water | $\frac{1}{10}$ | |

## FOLLOW-UP

1. If a person were in the larger fraction of every group, what would you know about this person?

2. What is the most surprising fraction you have discovered? Explain why.