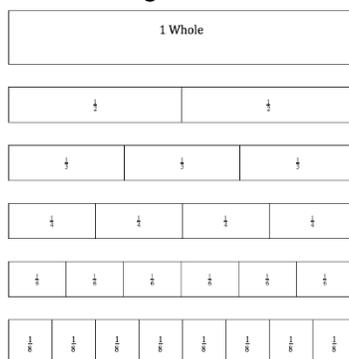**Standard 3.NF.1** Understand that a unit fraction has a numerator of one and a non-zero Denominator.

> **a.** Understand a fraction 1/b as the quantity formed by one part when a whole is partitioned into b equal parts.
>
> **b.** Understand a fraction a/b as the quantity formed by a part of size 1/b. For example: 1/4 + 1/4 + 1/4 = 3/4.

**Please Note:** Develop understanding of fractions as numbers. Denominators are limited to 2, 3,



4, 6, and 8 in third grade.

**Key Elements of the standard:**

- Understanding that fractions are compiled of equal parts is crucial to developing the foundation for fractions.

- Students should understand how a fraction's denominator determines the size of the pieces.  Unit fractions become smaller as their denominators become larger because the whole is being divided into more equal parts.  For example, 12 is larger than 18 because the whole is divided into two equal parts rather than 8 equal parts.

- Unit fractions can be combined, or added, together to form all other fractions.  Similarly, all fractions can be defined as the sum of its unit fractions. Also, it is possible for a numerator to be larger than a denominator, which will result in a fraction greater than one.
- Indicator b can also be interpreted as parts of a set.  Meaning out of all of the shapes, what fraction of them are squares.  Here is a fun video that helps teach this: https://www.youtube.com/watch?v=IshCN-3bP5I
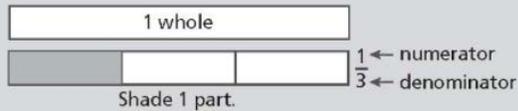
**Vocabulary:**

Fraction: A fraction describes equal parts of a whole.
Unit fraction: A fraction with one as the numerator. ( 12, 13, 14, 16, 18)
Numerator: The number of equal parts that are counted.
Denominator: The number of equal parts the whole is divided into

You can represent a **fraction** with a fraction bar. The **denominator** tells how many equal parts the whole is divided into. The **numerator** tells how many equal parts you are talking about.

```
┌─────────────────────────────┐
│           1 whole           │
└─────────────────────────────┘
┌────────┬────────┬────────┐      1  ← numerator
│▓▓▓▓▓▓▓▓│        │        │      ─
└────────┴────────┴────────┘      3  ← denominator
       Shade 1 part.
```

**Good Videos:**
**https://www.youtube.com/watch?v=CA9XLJpQp3c**
**https://www.youtube.com/watch?v=n0FZhQ_GkKw**
https://www.youtube.com/watch?v=TWCAnRMZyKo (Only the first part is for third grade)
https://www.youtube.com/watch?v=DnFrOetuUKg&t=25s


Unit fraction video:
https://www.youtube.com/watch?v=4gR1iKbNIJw


Video of Children's book "Give Me Half" by Stuart J. Murphy
https://www.youtube.com/watch?v=hVaxiJB6Fls