

Vocabulary Review Sheet

Lesson – Fractions and Fairness in Healthcare

How to Use

- Read each vocabulary word before or after watching the lesson video.
- Study the **math**, **real-life**, and **fairness** examples to understand how fractions help describe healthcare access.
- Notice that larger fractions represent *greater need* and smaller fractions show *more access*.
- Keep this sheet in your *Equity in Numbers Student Journal* as a study reference for quizzes and reflections.

Fraction

- **Definition:** A number that shows a part of a whole, written with a numerator (top) and denominator (bottom).
- **Math Examples:**
 - $250/1000 = 1/4$
 - $150/600 = 1/4$
 - $80/400 = 1/5$
- **Real-Life Example:** $1/4$ of a community lacks healthcare.
- **Fairness Example:** Fractions help us measure who has access to care and who is missing it, making inequalities visible.

Numerator

- **Definition:** The top number in a fraction that shows *how many parts* are being counted.
- **Math Examples:**
 - In $250/1000$, the numerator is 250.
 - In $3/20$, the numerator is 3.

- In $1/4$, the numerator is 1.
- **Real-Life Example:** The number of people *without healthcare* in a community.
- **Fairness Example:** The numerator tells us how many people still need access to reach fairness in care.

Denominator

- **Definition:** The bottom number in a fraction that shows *how many parts make up the whole*.
- **Math Examples:**
 - In $250/1000$, the denominator is 1000.
 - In $3/20$, the denominator is 20.
 - In $1/4$, the denominator is 4.
- **Real-Life Example:** The total number of people in the community.
- **Fairness Example:** The denominator helps us understand the size of the population we're comparing — large or small, everyone counts.

Simplify

- **Definition:** To make a fraction smaller by dividing both numerator and denominator by the same number.
- **Math Examples:**
 - $250/1000 \div 250 = 1/4$
 - $120/800 \div 40 = 3/20$
 - $150/600 \div 150 = 1/4$
- **Real-Life Example:** Simplifying shows that 1 out of 4 people lack healthcare, even if the total population changes.
- **Fairness Example:** Simplified fractions help compare communities of different sizes equally and fairly.

Compare

- **Definition:** To look at two or more fractions and see which represents a larger or smaller part.
- **Math Examples:**
 - $1/4 > 3/20$
 - $1/5 < 1/4$
 - $3/10 > 1/5$
- **Real-Life Example:** Comparing fractions shows which community has more people without healthcare.
- **Fairness Example:** Comparing helps identify which groups need more attention or resources to achieve healthcare equity.

Part-to-Whole

- **Definition:** A fraction that compares one portion to the entire group.
- **Math Examples:**
 - $1/4 =$ one out of four
 - $3/20 =$ three out of twenty
 - $1/5 =$ one out of five
- **Real-Life Example:** One-fourth of the population in a town lacks healthcare coverage.
- **Fairness Example:** Part-to-whole thinking helps leaders see how many individuals still lack equal access.

Access

- **Definition:** The ability to receive or make use of something important, like healthcare or education.
- **Math Examples:**
 - $3/4$ have healthcare access \rightarrow $1/4$ do not.

- 4/5 have care → 1/5 lack it.
- 19/20 covered → 1/20 need care.
- **Real-Life Example:** 1/4 of families in a city cannot visit a doctor regularly.
- **Fairness Example:** Measuring access shows how math can reveal injustice and guide fairness-focused decisions.

Gap

- **Definition:** The difference between two fractions or levels of access.
- **Math Examples:**
 - $1/4 - 1/5 = 1/20$
 - $3/10 - 1/5 = 1/10$
 - $1/2 - 2/5 = 1/10$
- **Real-Life Example:** The healthcare access gap between two communities can be seen by comparing fractions.
- **Fairness Example:** Closing the gap means helping under-served groups get the same care as others.

Need

- **Definition:** The amount of improvement or support required to reach full access.
- **Math Examples:**
 - 1/4 need care → 3/4 have it.
 - 1/5 need care → 4/5 have it.
 - 3/20 need care → 17/20 have it.
- **Real-Life Example:** 1 out of 5 people need help to reach healthcare coverage.
- **Fairness Example:** Fractions show that need isn't just a number — it's a measure of justice.

Equity

- **Definition:** Giving everyone what they need to achieve full access and opportunity.
- **Math Examples:**
 - $1/4$ need care → add $1/4$ support → total $4/4$ = full access.
 - $3/20$ need care → add $3/20$ → total $20/20$ = full coverage.
 - $1/5$ need care → add $1/5$ → total 1 → complete fairness.
- **Real-Life Example:** Equity means providing extra clinics or programs to underserved communities.
- **Fairness Example:** Math helps leaders see who needs more support so that every fraction of society can have equal healthcare access.

Summary of Math + Fairness Connections

Concept	Math Focus	Fairness Connection
Fraction	Part of a whole	Who has or lacks access
Simplify	Make numbers comparable	Compare fairly across communities
Compare	See which is bigger	Identify inequities
Gap	Difference between parts	Measure injustice
Equity	Adjust values	Ensure full access for all