

## Vocabulary Review Sheet

### Lesson – Coordinate Plane and Graduation Rates by District

#### How to Use

- Review each vocabulary word and its examples before your quiz.
- Connect **math definitions** to **real-world equity data** about schools and communities.
- Keep this sheet in your *Equity in Numbers Student Journal*.
- Remember: *Graphs and numbers tell stories about fairness and opportunity.*

#### Coordinate Plane

- **Definition:** A grid formed by two perpendicular lines — the **x-axis** (horizontal) and **y-axis** (vertical) — used to locate and compare points.
- **Math Example:** Plotting (3, 84) shows District C with an 84 % graduation rate.
- **Real-Life Example:** Students graph graduation rates for different districts to compare outcomes.
- **Fairness Example:** The coordinate plane helps us see where gaps exist, so resources can be directed where they're needed most.

#### Axis (Axes)

- **Definition:** The reference lines that form the coordinate plane.
- **Math Example:**
  - x-axis → Districts (A = 1, B = 2, C = 3 ...).
  - y-axis → Graduation Rate (%).
- **Real-Life Example:** The x-axis shows which district you're studying; the y-axis shows how high or low its graduation rate is.
- **Fairness Example:** Clear axes organize data so all groups' outcomes are visible and comparable.

### Ordered Pair ( $x$ , $y$ )

- **Definition:** A pair of numbers that locate a point on the coordinate plane —  $x$  = horizontal position,  $y$  = vertical value.
- **Math Example:** (4, 92) means District D ( $x = 4$ ) has a 92 % graduation rate ( $y = 92$ ).
- **Real-Life Example:** Each ordered pair can represent a student group's result in a district.
- **Fairness Example:** Every data point represents real students — each deserves recognition and opportunity.

### Plotting Points

- **Definition:** Marking locations on a graph using ordered pairs.
- **Math Example:** Plot (1, 84), (2, 86), (3, 89), (4, 80), (5, 88).
- **Real-Life Example:** Graphing graduation rates by district for Latino students.
- **Fairness Example:** Plotting all groups ensures no community's results are hidden or ignored.

### Line Graph

- **Definition:** A graph that connects data points with straight lines to show trends or comparisons over categories.
- **Math Example:** One line for Latino students and another for White students across five districts.
- **Real-Life Example:** Comparing how graduation rates rise or fall across different schools.
- **Fairness Example:** When lines are close together, opportunity is more equal — wider gaps show where fairness is lacking.

### Legend (Key)

- **Definition:** Explains what each color, symbol, or line on a graph represents.
- **Math Example:**  
● = White students   ● = Latino students   ● = Black students
- **Real-Life Example:** Color-coded lines help viewers identify which group each trend belongs to.
- **Fairness Example:** A clear legend ensures every group's data is labeled and valued equally.

### Scale

- **Definition:** The evenly spaced numbers on the axes showing measurement units.
- **Math Example:** y-axis = 60 %, 70 %, 80 %, 90 %, 100 %.
- **Real-Life Example:** A fair scale makes it easy to see progress or inequities between schools.
- **Fairness Example:** Accurate scales prevent exaggeration or hiding of disparities.

### Equity Gap

- **Definition:** The numerical difference between the highest and lowest group values in a dataset.
- **Math Example:** District D → Highest = 92 %, Lowest = 70 % → Gap = 22 points.
- **Real-Life Example:** The equity gap shows how much improvement is needed to reach fairness.
- **Fairness Example:** Smaller gaps mean more equal opportunities; larger gaps signal areas for change.

### Trend

- **Definition:** The overall direction that data points move — upward, downward, or flat.
- **Math Example:** Lines slanting upward show increasing graduation rates.

- **Real-Life Example:** A steady upward trend can mean successful policies or programs.
- **Fairness Example:** Positive trends in all groups mean equitable progress.

### Data Analysis

- **Definition:** Examining numbers to find patterns, differences, or relationships.
- **Math Example:** Calculating average graduation rates for each group.
- **Real-Life Example:** Comparing which districts narrowed their equity gaps over time.
- **Fairness Example:** Using data analysis helps leaders make informed, fair decisions for all students.

### Representation (in Data)

- **Definition:** Making sure information includes all groups and presents them accurately.
- **Math Example:** Including Latino, Black, White, Asian, and Native student data in one graph.
- **Real-Life Example:** Reports that show every community's graduation rate side-by-side.
- **Fairness Example:** Representation in data ensures visibility and accountability for every group.

### Summary of Math + Fairness Connections

Concept	Math Focus	Fairness Connection
Coordinate Plane	Organize data by (x, y) points	Visualizes equity across districts
Line Graph	Connects trends between groups	Shows progress or disparities clearly
Equity Gap	Highest – Lowest value	Reveals where fairness needs action

<b>Concept</b>	<b>Math Focus</b>	<b>Fairness Connection</b>
<b>Trend Analysis</b>	Tracks direction of change	Measures improvement toward equality
<b>Representation</b>	Inclusive data display	Ensures every group's story is seen