

Subject: Graphing Linear Equations and Functions

Unit: Chapter 4

Part I: Clarity of Learning Targets

**What are the grade level indicators that go with this unit? Place a star next to the grade level indicators that are Power Indicators. Are the indicators in student friendly language? Place the level of Bloom’s Taxonomy next to each Power Indicator.**

Graph linear equations in standard form and slope-intercept form (EQ2)  
 Identify solutions from graphs and relations (EQ1)  
 Formulate and obtain solutions using direct variation (EQ1)  
 Recognize changes in slope and rate of change (EQ1)  
 Determine slope and rate of change (EQ2)  
 Translate linear function graphs (EQ2)

**What are the Big Ideas that go with this unit?**

- 1) Graphs are used to visually represent linear equations to help identify solutions
- 2) Using graphs of linear equations in multiple representations to model functions of real-world problems.

**What are the Essential Questions that go with this unit?**

- 1) Why do we use graphs?
- 2) How can you represent real-world problems graphically?
- 3) What key concepts from linear equations in different forms are needed to graph a line?

**What strategies will we use in order to make learning targets clearer for all students, before, during and after instruction? How will you communicate the learning indicators to students?**

Post learning targets  
 Daily discussions of learning targets  
 Pre/post chapter check list

**Part II: Feedback and Assessments (Formative and Summative)**

**How will we provide students with feedback throughout the unit?**

**What formative assessments will we use? (Non-graded assignments that check for understanding and provide feedback to the students) Incorporate the 7 Strategies of Assessment for Learning here.**

Use Senteos for immediate feedback of student answers during class

Daily Bell Work

Examples of strong and weak work

**How will students be involved with keeping track of their own learning progress (note—this is different than tracking points for a grade)?**

I can checklist of learning targets

White boards/clickers

Daily notes

**What summative assessments will we use? (Graded, evaluative assessments)**

Chapter 4 test

Chapter 4 quizzes

Chapter 4 Line and Point Art Project

**How Can I Close the Gap?**

**What will we do AFTER the students have completed the formative assessment to differentiate instruction?**

If they are successful, move on. If the majority of class is unsuccessfully Reteach in a different way. If a few students are unsuccessfully then provide one on one instruction.

**What interventions will we provide for students who do not do well on the formative assessment?**

One on one instruction during class time while others are working on appropriate problems.

Math tutoring available throughout the day.

Before school or after school instruction.

**What will we do for the students who are on track?**

Provide appropriate problems to challenge their thinking

**What will we do for the students who excel? What extension activities will we provide?**

Provide appropriate problems to challenge their thinking

**Part III: Instruction and Student Activities**

**What instructional and student activities will we use for this unit? These activities should directly align with the indicators and assessments.**

- Graphing linear equations worksheets
- Graphing using intercepts worksheets
- Graphing using slope-intercept worksheets
- Graphing Calculator activity
- Modeling direct variation worksheet
- Cognitive tutor math software aligned with learning targets