Nonlinear Lesson Plan

Text: CORD Algebra 1 – Learning in Context

Volume: third edition Chapter: 5
Unit number: Title of unit:

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Short Description (Be sure to include where in your unit this lesson takes place):

Evaluating functions. This lesson follows-up from the lab to show algebraic expressions that are distinguishable as linear, composite and nonlinear functions. Students will together with the instructor graph several nonlinear functions to identify begin to recognize the graphic representation of a nonlinear function.

LESSON PLAN

TEACHER: Teacher Prep/Lesson Plan

- Lesson Objectives (Students will be able to:)
 - Evaluate functions
 - Determine if a function is linear or nonlinear
- List of prerequisite skills needed:
 - Graph ordered pairs, working with functions
- Vocabulary:

linear function, composite function, nonlinear function, absolute value, exponent

• State Standards addressed: (You may use your District's Power Standards if applicable, Highlight "Green" Standards)

Math:

A1.7.A Sketch the graph for an exponential function of the form $y = ab^n$ where n is an integer, describe the effects that changes in the parameters a and b have on the graph, and answer questions that arise in situations modeled by exponential functions.

Reading:

2.2 Understand and apply knowledge of text components to comprehend text.

3.1 Read to learn new information

Writing:

Leadership:

- **Teacher Preparation:** (What materials and set-up are required for this lesson?)
 - Students will need graph paper and the text section 5.2 pages 279-282
- Content Delivery: (How will the lesson be delivered? List any grouping and instructional strategies as well.)

- Students will be guided through the plotting and graphing of several nonlinear problems
- Instructional Documents (Please attach any Worksheet, Quiz, Reading Guide, etc)
 - Make 2 back to back pages of the "AnalyzeGraph" papers for each student.
- Assessment Tool used in this Lesson (scoring method, guide, or rubric)
 - The second sheet of "AnalyzeGraph" papers will be done individually and compared to class buddy before submitted together.
- Reinforcement/Intervention/Extension Activities
 - Reinforcement will occur
- Career Applications (When will this be used in "real life"?)

Math Council

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EQUATION TABLE GRAPH TABLE **EQUATION** GRAPH