Unit #4: Function Evaluation

Content Area: **Math**
Course(s):
Time Period:
Length: **8 Days**
Status: **Published**

State Mandated Topics Addressed in this Unit

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N/A	N/A

Function Evaluation

Learning Objectives

- If f is a function and x is an element of its domain, then f(x) denotes the output of f corresponding to the input x. The graph of f is the graph of the equation y = f(x).
- Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes. For example, if the function h(n) gives the number of person-hours it takes to assemble n engines in a factory, then the positive integers would be an appropriate domain for the function.
- Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range.
- Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.

Essential Skills

- Essential Skill 1 - Artists will be able to understand that a function has one member of the domain assigned to exactly one element of the range.
- Essential Skill 2 - Artists will be able to understand F(x) denotes the output of f corresponding to the input of x.
- Essential Skill 3 - Artists will be able to understand the graph of f is the graph of y=f(x)
- Essential Skill 4 - Artists will be able to use function notation to evaluate functions for inputs in their domain.
- Essential Skill 5 - Artists will be able to interpret statements that use function notations in terms of context.
- Essential Skill 6 - Artists will be able to relate the domain of a function to its graph.
- Essential Skill 7 - Artists will be able to relate the domain of a function to the quantitative relationship that it describes.

Standards

MATH.9-12.F.IF.A.1	Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x. The graph of f is the graph of the equation $y = f(x)$.
MATH.9-12.F.IF.A.2	Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.
MATH.9-12.F.IF.B.5	Relate the domain of a function to its graph and, where applicable, to the quantitative relationship it describes.

Instructional Tasks/Activities

- Academic games
- Independent practice
- Ladder Activity
- Ti-Nspire activities
- Worksheets

Assessment Procedure

- Class discussions
- Classroom Total Participation Technique
- Classwork/homework
- DBQ
- Electronic active responders
- Essay
- Exit Ticket/Entrance Ticket/Do Now
- Identify the error problems
- Journal / Student Reflection
- Kahoot
- Other named in lesson
- Peer Review
- Performance
- Problem Correction
- Project
- Quiz
- Quizzes/tests
- Response and analysis questions
- Rubric

- Teacher Collected Data
- Teacher observations
- Test
- Worksheet

Recommended Technology Activities

- Appropriate Content Specific Online Resource
- Chromebook
- Copy/Paste Content Specific Link Here
- Gimkit
- GoGuardian
- Google Classroom
- Google Docs
- Google Forms
- Google Slides
- Kahoot
- MagicSchool AI
- Other- Specified in Lesson
- Quiziz
- Screencastify
- TI-Nspire CX-Cas activities throughout the unit as appropriate

Accommodations & Modifications & Differentiation

Accommodations and Modifications should be used to meet individual needs. Their IEP and 504 plans should be used in addition to the following suggestions.

Special Education

Modifications and accommodations to this unit will be based on individual IEP needs and through the collaboration of the classroom teacher and the special education teacher under the direction of the Supervisor of Special Education.

Gifted and Talented

- Compare & Contrast

- Conferencing
- Debates
- Jigsaw
- Peer Partner Learning
- Problem Solving
- Structured Controversy
- Think, Pair, Share
- Tutorial Groups

Instruction/Materials

- alter format of materials (type/highlight, etc.)
- color code materials
- eliminate answers
- extended time
- extended time
- large print
- modified quiz
- modified test
- Modify Assignments as Needed
- Modify/Repeat/Model directions
- necessary assignments only
- Other (specify in plans)
- other- named in lesson
- provide assistance and cues for transitions
- provide daily assignment list
- read class materials orally
- reduce work load
- shorten assignments
- study guide/outline
- utilize multi-sensory modes to reinforce instruction

Environment

- alter physical room environment
- assign peer tutors/work buddies/note takers
- assign preferential seating
- individualized instruction/small group
- modify student schedule (Describe)

- other- please specify in plans
- provide desktop list/formula

Honors Modifications

Resources

- https://curriculum.newvisions.org/math/course/algebra-ii/
- www.Khanacademy.com