Unit #2: Portfolio Completion

Content Area: **Math**
Course(s):
Time Period:
Length: **7 Days**
Status: **Published**

State Mandated Topics Addressed in this Unit

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N/A	N/A

Portfolio Completion

Learning Objectives

- Choose and interpret the scale and the origin in graphs and data displays.

- Choose and interpret units consistently in formulas.

- Combine standard function types using arithmetic operations. For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.

- Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.

- Define appropriate quantities for the purpose of descriptive modeling.

- Determine an explicit expression, a recursive process, or steps for calculation from a context.

- Use units as a way to understand problems and to guide the solution of multi-step problems.

- Write a function that describes a relationship between two quantities.

Essential Skills

- Essential Skill 1 - Artists will be able to apply scales to graphs, origin of graph and data displays.

- Essential Skill 10 - Artists will be able to write a function that describes a relationship between two quantities.

- Essential Skill 11 - Artists will be able to combine functions using arithmetic operations.

- Essential Skill 12 - Artists will be able to build a function by combining two functions and relate the resulting functions to a model.

- Essential Skill 2 - Artists will be able to use units to make sense of solutions.

- Essential Skill 3 - Artists will be able to apply scales to multi-step problems and formulas.

- Essential Skill 4 - Artists will be able to interpret units in formulas. Choose units in formulas.

- Essential Skill 5 - Artists will be able to define quantities for descriptive modeling problems. (Incorporate appropriate units).

- Essential Skill 6 - Artists will be able to create and solve equations.

- Essential Skill 7 - Artists will be able to create and solve inequalities.

- Essential Skill 8 - Artists will be able to write a function that describes a relationship between two quantities

- Essential Skill 9 - Artists will be able to determine an explicit expression, recursive process, or steps for calculations from a given context

Standards

MATH.9-12.F.BF.A.1.a	Determine an explicit expression, a recursive process, or steps for calculation from a context.
MATH.9-12.F.BF.A.1.b	Combine standard function types using arithmetic operations.
MATH.9-12.N.Q.A.1	Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.
MATH.9-12.N.Q.A.2	Define appropriate quantities for the purpose of descriptive modeling.
MATH.9-12.A.CED.A.1	Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.

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
- Copy/Paste Content Specific Link Here
- 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