Unit 3d-Functions

Content Area: **Mathematics**
Course(s): **Math 7 Pre-Algebra Honors**
Time Period: **Marking Period 3**
Length: **WK 4-6 Go Math! Advanced 2 Module 14**
Status: **Published**

Essential Questions

- How can you identify and represent functions?
- What are some characteristics that you can use to describe functions?
- How can you use tables, graphs, and equations to compare and describe functions?

Big Ideas

Define, evaluate and compare functions.

Diversity Integration

Objective: Students will research countries that use the metric system and explore whether conversions from standard to metric measurements are functions or not.

Description of Activity: Students will look up the temperature in various countries. They will decide if the temperature is fahrenheit or celsius. They will compare the temperatures and decide if there is a rule that can be applied to convert the temperature. They will explain whether this rule is a function or not.

CSDT Technology Connection

8.2.8.ED.1 Evaluate the function, value, and aesthetics of a technological product or system, from the perspective of the user and the producer.

Enduring Understandings

Expressions and Equations

8.F.A.1 Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.

8.F.A.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions.

8.F.A.3 Interpret the equation y=mx+b as defining a linear function, whose graph is a straight line; give examples of functions that are not linear.

8.F.B.5 Describe qualitatively the functional relationship between two quantities by analyzing a graph (e.g., where the function is increasing or decreasing, linear or nonlinear) Sketch a graph that exhibits the qualitative features of a function that has been described verbally.

Mathematical Practices Focus

1. Make sense of problems and persevere in solving them. Lesson 14.2, 14.3

2. Reason abstractly and quantitatively. Lesson 14.1, 14.2, 14.3, 14.4

3. Construct viable arguments and critique the reasoning of others. Lesson 14.1, 14.2, 14.3, 14.4

4. Model with mathematics. Lesson 14.1, 14.3, 14.4
5. Use appropriate tools strategically. Lesson 14.1, 14.2

6. Attend to precision. Lesson 14.1, 14.2, 14.4