## Backwards Design Template

Name of lesson/ unit: Interpreting Functions Grade Level: $\square$ k $\square$
$\square$ 2 $\square$
$\square$ 4 $\square$ 5 $\square$ 6 $\square$ $\square_{7}$ $\square$ $\checkmark 9$ $\square$
$\square$ 11 $\square$ $12 \square$ college
 Osocial Studies/ History $\bigcirc$ Fine Arts〇PE/Health Foreign Languages

Links to Standards: These links will take you to a web page
CCSS ELA
CCSS Math
CCSS History/SS
Next Gen Science
Fine Arts
PE/Health
Computer Science/Technology
Foreign Languages

## Stage 1-Desired Results

Content Standard(s):
Copy and paste them here:
F-IF.1, F-IF.2, F-IF.A.Int.1, F-IF.4-1, F-IF.5-1, F-IF.5-2

| Understanding(s): <br> Students will understand that . . . <br> -Write a function to model a real-life situation -Interpret the components of a function as they relate to a real-life situation -Graph functions -Identify key features of a function's graph (increasing/decreasing, min/max, domain/range, end behavior) | Essential Question(s): <br> How do a function and its graph relate to a real-life situation? |
| :---: | :---: |
| Other Notes: |  |
| Stage 2-Acceptable Evidence |  |
| Performance Task(s) <br> How do the students prove they understand the concept(s)? <br> What are the tasks? <br> Given a real-life situation, students will be able to write and graph a function to model that situation and interpret the key features of the function and graph and explain the meaning as they relate to the situation. <br> Tasks: <br> -Presentation using technology <br> -Written paper <br> -Poster or other visual representation | Other Evidence and Formative Assessment works: Individual practice of skills Quizzes Tests |
| Rubric: Create a rubric at http://rubistar.4teachers.org/ <br> Copy the url to the created rubric and paste it here: <br>  |  |
| Stage 3- Learning Plan |  |
| Learning Activities: <br> Type your lesson plan here: <br> Prior to completing this project, students will be able to: -Use function notation and interpret statements that use fu -Identify functions from a variety of representations. -Evaluate $\mathrm{f}(\mathrm{x})$ for many functions. <br> -Translate between symbolic representations of functions -Find outputs given inputs and inputs given outputs. -Relate the domain of a function to its graph and to the co -Interpret key features of a function represented as a grap -Sketch graphs showing key features given a verbal desci -Calculate and interpret the average rate of change of a fu -Estimate the rate of change from a graph. | ction notation in terms of a context. <br> nd tables or graphs. <br> ext. <br> or a table. <br> tion of the relationship. <br> ction over a specified interval. |

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Adapted from Grant Wiggins and Jay McTighe-Understanding by Design

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Thank you for sharing!

