

US National Debt Challenge Problem

Seventh and Eighth Grade Math



Developed by:

The teachers, students, and mentors in the
Gaming Research Integration for Learning Laboratory® (GRILL®) Summer 2015

TABLE OF CONTENTS

Table of Contents.....	2
1. US National Debt challenge Problem.....	3
1.1. introduction	3
1.2. Problem.....	3
1.3. Parameters.....	3
1.4. Project Write-Up	3
1.5. Rubric	3

1. US NATIONAL DEBT CHALLENGE PROBLEM

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1.1. INTRODUCTION

A common theme in politics today is the amount of debt the US has run into. With this in mind, research and assess the current situation of the US debt. Many notable figures have developed plans to reduce the national debt and some have been adopted.

1.2. PROBLEM

Your end goal is to develop a 5 year plan that can reduce the amount of debt within our country and how it will affect the country and the individual.

1.3. PARAMETERS

- Your predictions must be authentic and backed by data.
- Your solution cannot take away more than 5% of funding from a funded sector per year.
- Your solution must span over the course of 5 years.
- Define your own inflation rate.

1.4. PROJECT WRITE-UP

- Description of problem and why it is important
- Debt to revenue analysis
 - Is our debt out of control?
- Percentage increase analysis and future predictions
 - What was the debt percentage increase per year from 2005-2015?
 - What was the greatest debt increase in one year? What was the greatest decrease?
 - What was the percentage increase per year in Gross Domestic Product?
- Graph illustration of future projections
 - Must be done virtually
- Potential solution to reduce the debt
 - Include implications for each expenditure reduction/increase
 - Include inflation rate
- Works Cited Page

1.5. RUBRIC

Category	Components	Points Earned	Comments
<i>Calculations</i>	<ul style="list-style-type: none"> - Percentage increase for each year (2005-2015) - Debt accumulated in each year - Debt increase illustrated by negatives; debt decrease represented with plus sign - Future debt projections are illustrated graphically with an equation - Debt reduction in plan correctly calculated 	/30	
<i>Project Write-Up</i>	<ul style="list-style-type: none"> - All components listed under "Project Overview" are included 	/25	
<i>Solution Presentation</i>	<ul style="list-style-type: none"> - Presentation of solution is prepared with visuals, is easy to follow, and lasts between 3-5 minutes 	/20	
<i>Assumptions</i>	<ul style="list-style-type: none"> - Any and all assumptions are stated and explained at beginning of appropriate section 	/15	
<i>Grammar/Mechanics</i>	<ul style="list-style-type: none"> - Correct spelling and punctuation - Units illustrated appropriately - Layout is easy to follow 	/5	
<i>Research & Work Cited Page</i>	<ul style="list-style-type: none"> - All research used in project is found under Works Cited page and is consistent in format 	/5	
<i>Total</i>		/100	