## Rich Kid Smart Kid Games

Game Two: Reno's Dilemma
Topic: Good Debt/Bad Debt

## Grade Level: 9-12

## Interactive Internet Game Activity

Debt really is very much a part of life. What adults fail to teach young people is that there is good debt and bad debt. Bad debt works against you only getting you farther in debt (the great thief). Good debt allows you to make more money than you are paying for the debt you have incurred. Now it's time to find out what kind of debt it is - good or bad?

## Learning Objectives

- Examine debt to determine if it is good or bad
- Calculate percentages
- Interpret information to determine positive or negative returns on an investment


## Assessments

Students will: (1) Analyze information to determine good and bad debt, (2) Calculate percentages when given interest and return on investment information, (3) Analyze positive and negative debt/return information to determine the preferred debt to incur.

## Classroom Activities

1. Good Debt, Bad Debt - The Tale of Two Loans - Read the introductory information about the national debt and the comparison of good and bad debt. Discuss interest as it relates to debt. Then guide students through the graphic that illustrates the accumulation of good and bad debt.
2. Be the Bank - Use this information to explain "How a bank works." Emphasize the information provided in the two boxes: Two Points to Consider and Summary \& Conclusion. This information will be the basis for the two activities.
3. Be the Bank - Math: Test Your Understanding - Students will look at the two choices for determining the preferred debt/return combination. They will need to consider the difference between the percentage being borrowed and the rate of return. Which will provide them with the largest gain?
4. Be the Bank - Math: Test Your Skill - This lesson will fit into your curriculum well as a review of percentages. Students will need to calculate the amount of return or the interest paid based on the given percentage. Then, students need to compare this amount with the corresponding interest paid or the amount of return. It is good debt if the amount of return exceeds the interest paid. It is bad debt if the interest paid exceeds the amount of return. If it is bad debt, students will circle the sad face. If it is good debt, students will circle the happy face.

## Class Discussion Questions

1. What do you think about having debt after completing the activities?
2. If everyone could understand the idea behind "Be the Bank," why would anyone deposit money in the bank?
3. Is there any occasion when it would be good if the interest paid would exceed the rate of return?

## Overview

## Good Debt, Bad Debt

The United States Treasury has a debt of \$6,000,000,000 (that's 6 trillion). Do an Internet search for debt and you will hit about a million matches. It's normal for a business to have millions in debt. The typical household has a mortgage debt, car debt, and credit card debt. The average college age person has 4 credit cards and $\$ 5,000$ in debt. We even have debts of gratitude and debts to society. The world is full of debt. Debt, it would seem, is part of life. The question is not about having debt, the question is what kind of debt do we have. Is it good debt or bad debt?

Bad debt is a great thief. A con artist that will quietly take your money. Would you notice if someone took $\$ 2,000$ from you? A credit card will. If you pay off a credit card debt of $\$ 2,500$ at $\$ 50$ per month instead of $\$ 100$ per month, you will lose an extra $\$ 2000$ in interest.

But interest does not make the debt a bad debt (or a good debt), it's what it does to your income that makes it a bad debt or a good debt. Does it take your money or create you money?


## Be The Bank

How does a bank work? The banking business model is very simple. Group A deposits their money with the bank and the bank pays them interest. Group B comes to the bank to borrow money. The bank loans out the same money they got from Group A. The secret is, they charge more interest to Group B than they pay to Group A.
Deposits to the Bank

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Group A
Group A

Group B
Borrows from the Bank

So the bank makes money by serving as a middle man for loans.

\section*{Two Points to Consider}
- When you make a deposit, you are actually loaning money to the bank.
- When you go to the bank to get a loan, you are actually borrowing back your own money!


\section*{Summary \& Conclusion}
- The bank borrows money at a low rate, then uses that money to earn a higher rate.
- You need to be the bank.

When you borrow money, the rate you pay is called interest rate.
When you invest money, the rate you earn is called rate of return or return on investment.
Bad Debt is when you are paying more in interest than you are getting in return (if any).
Good Debt is when you are paying less in interest than you are getting in return.

\section*{Be The Bank - Math}

\section*{Test Your Understanding}

In each set, circle the arrow pointing to the preferred debt/return combination.


\section*{Test Your Skill}

In each scenario, determine if it is Good Debt or Bad Debt. Circle the happy face for Good Debt or the sad face for Bad Debt.


\section*{Test Your Understanding}

Answer Key


> Borrow at 9\% Return of \(10 \%\)


Borrow at \(12 \%\)
Borrow at 6\% Return of \(15 \%\) Return of \(8 \%\)

\section*{Test Your Skill} Answer Key
Amount \(=\$ 10000\)
Interest Paid \(=\$ 2000\)
Return \(=25 \%\)


Amount \(=\$ 8000\)
Interest Paid = 10\%
Return \(=\$ 900\)


Amount \(=\$ 110000\)
Interest Paid \(=\$ 8800\)
Return \(=9 \%\)


Amount \(=\$ 210000\)
Interest Paid \(=12 \%\)
Return \(=\$ 29400 \%\)


Amount \(=\$ 4200\)
Interest Paid \(=\$ 252\)
Return \(=8 \%\)
Amount \(=\$ 3700\)
Interest Paid \(=18 \%\)
Return \(=\$ 185\)
\begin{tabular}{|l|}
\hline Amount \(=\$ 72450\) \\
Interest Paid \(=\$ 8694\) \\
Return \(=11.25 \%\) \\
\hline
\end{tabular}

Amount \(=\$ 61497\)
Interest Paid \(=7.125 \%\)
Return \(=\$ 4458.53\)```

