Interest: What Does It Mean? Part I
Copyright © Texas Education Agency, 2014. These Materials are copyrighted © and trademarked ™ as the property of the Texas Education Agency (TEA) and may not be reproduced without the express written permission of TEA, except under the following conditions:

1) Texas public school districts, charter schools, and Education Service Centers may reproduce and use copies of the Materials and Related Materials for the districts’ and schools’ educational use without obtaining permission from TEA.

2) Residents of the state of Texas may reproduce and use copies of the Materials and Related Materials for individual personal use only, without obtaining written permission of TEA.

3) Any portion reproduced must be reproduced in its entirety and remain unedited, unaltered and unchanged in any way.

4) No monetary charge can be made for the reproduced materials or any document containing them; however, a reasonable charge to cover only the cost of reproduction and distribution may be charged.

Private entities or persons located in Texas that are not Texas public school districts, Texas Education Service Centers, or Texas charter schools or any entity, whether public or private, educational or non-educational, located outside the state of Texas MUST obtain written approval from TEA and will be required to enter into a license agreement that may involve the payment of a licensing fee or a royalty.

For information contact: Office of Copyrights, Trademarks, License Agreements, and Royalties, Texas Education Agency, 1701 N. Congress Ave., Austin, TX 78701-1494; phone 512-463-7004; email: copyrights@tea.state.tx.us.
Objectives

- Understand how interest can affect your standard of living
- Learn about tools you can use to help you understand what you are paying or earning in interest
- Make wise life-long choices based on your ability to shop for interest rates
Terms to Know

- Adjusted gross income
- Assets
- Compound interest
- Equity
- Gross pay
- Interest
- Liabilities
- Net pay
- Principal
- Rule of 72
- Simple interest
- Tax deduction
- Tax credit
What is interest?
Interest

- Have you ever been confused about interest?
- If you are being paid interest on an investment, interest is working for you.
- If you are paying interest on a loan, interest is working against you.
Understanding Interest

- Understanding what we are paying in interest can help us shop for loans in order to minimize the interest we pay.

- It can also help us make choices about investments in order to maximize them.
Simple Versus Compound Interest

- Simple interest pays interest only on your initial deposit.
- Compound interest pays interest on the earned interest as well as the initial deposit, which means it could earn you more money if you have a long-term investment.
The Rule of 72 is a great way to estimate how your investment will grow over time. If you know the interest rate, the Rule of 72 can tell you approximately how many years it will take for your investment to double in value.
Rule of 72

- You can divide 72 by the annual rate of interest to figure out how long it will take you to double your money.

- You can also calculate what interest rate you need to double your money by dividing 72 by the number of years in which you wish to double your money.
Rule of 72

How to Teach the Rule of 72 to Children
(click on link)
Rule of 72 Scenario

You are an 18-year-old and have been working evenings and weekends at a local restaurant for two years. You have managed to save $4000.00 of your salary and tips. How long will it take to double your money with an expected rate of return of 12%?
Making Interest Work for You
Deciding Where to Save

Savings institutions available to consumers include:

- Commercial banks
- Credit unions
- Mutual savings banks
- Savings and loan institutions
Saving Your Money

Where to Stash Your Money
Before You Invest

• Have accessible credit
• Invest in a variety of investments from different institutions
• Set a reasonable budget
• Start and continue a savings program
Is This Interest Working for You?

Interest earned on investments works for you because it increases the money you can spend on other things.
What is the average household credit card debt?
U.S. Household Debt

• Average credit card debt: $15,191.00
• Average mortgage debt: $154,365.00
• Average student loan debt: $33,607.00
American Consumer Debt

• $11.68 trillion in debt, an increase of 3.7% from last year
• $854.2 billion in credit card debt
• $8.15 trillion in mortgages
• $1,115.3 billion in student loans, an increase of 13.9% from last year
What are the advantages and disadvantages of credit?
Advantages of Using Credit

• Permits immediate consumption
• Enables purchase of items not otherwise affordable
• Helps with emergencies
• Allows consumers to take advantage of sales or special promotions
Advantages of Using Credit

• Helpful when making travel reservations
• Facilitates ordering by mail or Internet
• May be used to finance education
• Offers convenience
Disadvantages of Using Credit

- Causes embarrassment over debt
- Enables impulse buying
- Fuels the temptation to overspend
- If improperly used, can lead to serious problems
- Increases risk of identity theft
- Leads to insecurity/unhappiness
Disadvantages of Using Credit

- Is costly
- Leaves many unsatisfied wants
- Reduces financial flexibility in personal money management
- Causes tension and/or family friction
- Ties up future income
- Causes worry over money
Tips for Controlling the Interest You Pay

• Avoid applying for too many credit cards.
• Make sure your credit history is A+.
• Shop around for the lowest interest rate.
• Use credit cards for emergencies only.
Tools to Use to Determine Interest Amounts

There are many tools to help you determine interest rates and amounts:

- A calculator
- Computer spreadsheets
- Interest calculators
- Your brain
To understand how interest works, we are going to do problems using all the tools mentioned in the previous slide.

These problems will enlighten you as you look at totals and analyze what it might cost you to:

- determine how much you might earn from an investment
- obtain a mortgage
- purchase a vehicle
- use a credit card
Using Your Brain and a Calculator

- The activities Is Your Interest Working for You? and How Money Grows it will help you picture how money grows through compounding over a period of years.

You will:

- Use a calculator to calculate interest and evaluate if this is interest that adds to your spendable income or takes away from your spendable income.
QUESTIONS:
References and Resources

Images:
Microsoft Clip Art: Used with permission from Microsoft.

Textbooks:

Websites:
- BankRate
  Use our calculators to finesse your monthly budget, compare borrowing costs and plan for your future. See our full list of calculator and decision tools.
  http://www.bankrate.com/calculators.aspx

- Board of Governors of the Federal Reserve System
  Consumer guide on interest rates and credit card information.
  http://www.federalreserve.gov/creditcard/rates.html

- Creditcards.com
  The set of calculators on the website are designed to help you find answers to your financial questions.
  http://www.creditcards.com/calculators/

- Federal Deposit Insurance Corporation (FDIC)
  Preserves and promotes public confidence in the U.S. financial system by insuring deposits in banks and thrift institutions for at least $250,000; by identifying, monitoring and addressing risks to the deposit insurance funds; and by limiting the effect on the economy and the financial system when a bank or thrift institution fails.
  http://www.fdic.gov/
References and Resources

- Federal Reserve.gov
  Sample of a Credit Card
  http://www.federalreserve.gov/creditcard/flash/offerflash.html

- Myarmyonesource.com
  Debt Payoff Calculator
  http://www.myarmyonesource.com/data/calculators/debt_payoff/debt_payoff.html

- MyMoney.gov
  Save and invest your money.
  http://www.mymoney.gov/save-invest/Pages/saveandinvest.aspx

- Practical Money Skills for Life
  To help consumers and students of all ages learn the essentials of personal finance, Visa has partnered with leading consumer advocates, educators and financial institutions to develop the Practical Money Skills program.

- Videos:
  - Khan Academy
    Introduction to Mortgage Loans
    https://www.khanacademy.org/science/core-finance/housing/mortgages-tutorial/v/introduction-to-mortgage-loans

  - How to Teach the Rule of 72 to Children
    Teaching Children about the Rule of 72
    http://youtu.be/ShweCeTektO