

# Oklahoma's Personal Financial Literacy Passport

**Standard 5: The student will analyze the costs and benefits of saving and investing.**

## **Standard 5. Savings and Investing**

Lesson 5.1 - Savings and Investing: Getting Started

Lesson 5.2 – The Rule of 72

Lesson 5.3 – Savings and Investing Tools

Handout 5.3.1 – Savings and Investing Strategies

Lesson 5.4 – Time is Money

Handout 5.4.1 – Financial Planning You Decide



Teacher Presentation Series 5

- 📌 Explain reasons for saving and investing to meet goals and build wealth (e.g., opportunity cost, return on investment, emergencies, major purchases, down payments, and education).
- 📌 Identify and compare the costs and benefits of various investment strategies (e.g., compound interest, tax implications, account liquidity, and investment diversification) and how inflation affects investment growth.



# **Standard 5.**

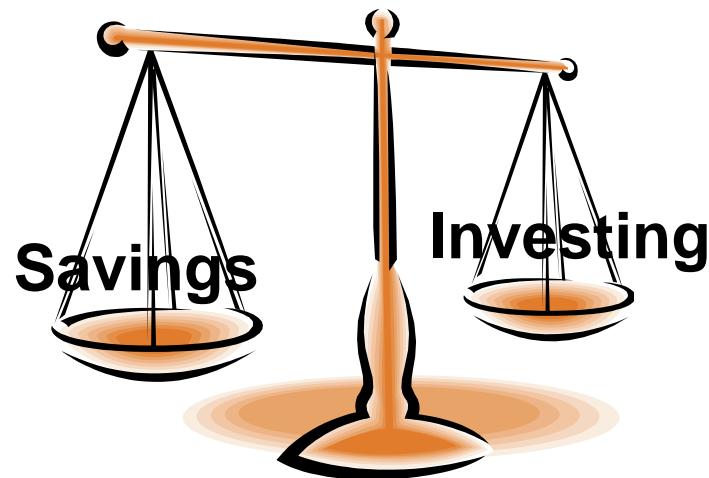
## **Savings and Investing**

### **Savings and Investing: Getting Started**

# = *Payoff* =



- Identify reasons that people save and invest.
- Weigh the costs and benefits of saving and investing.
- Explain the difference between saving and investing.



# Down Payment



- 💰 “But Mom, why can I not have it now?”
- 💰 Micah heard those words every time he took his Mom and little brother to the store.
- 💰 Micah’s mom knew the value of saving for the future and had helped Micah understand, too.
- 💰 Micah’s mom worked two jobs to pay the bills and kept a small savings account for emergencies.

# Down Payment



👛 Micah had his own savings account and in only two more months, and he could buy his own car and he would not have to listen to his brother whine about what he could not have.



# == Cache ==



- Investing
- Liquidity
- Opportunity Cost
- Risk
- Saving
- Savings
- Savings Account



# **Building Interest**



- 💰 What are some reasons to save money?
- 💰 What does it mean to “pay yourself first?”
- 💰 What should you do if you have made too many purchases on your credit card and have little or no money left to pay your bills?
- 💰 What is the best way to get the money for the things you need or want?



# Deciding to Save



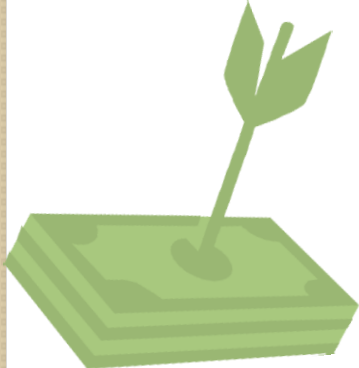
- 🏆 Decisions about savings involves opportunity costs.
- 🏆 Opportunity Costs - things you give up today to fund your future goals.
- 🏆 Before purchasing, ask yourself: “Do I want this more than reaching my personal or financial goals?”



# Strategies for Saving



- 💰 “Pay yourself first” is saving a portion of your earnings before spending any.
- 💰 Saving money can be done in two different ways.
  - In a safe place, where it will earn interest
  - In government savings bonds, money market accounts, or certificates of deposit (CDs)

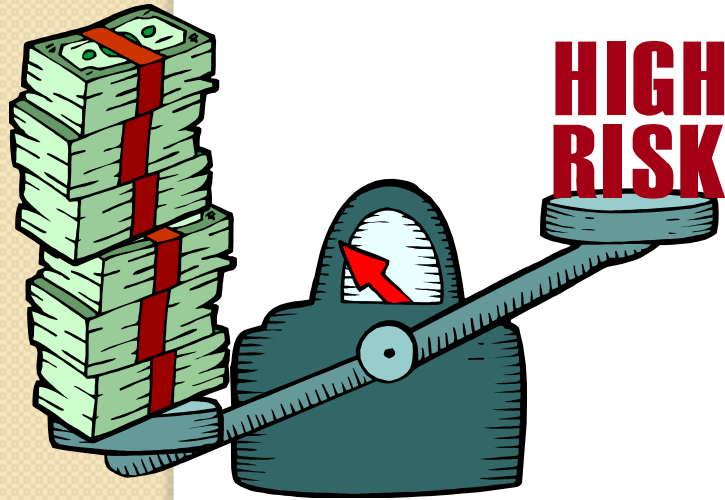


# Strategies for Saving



- 💰 Liquidity - Ease of turning an item into cash without losing money
- 💰 Some savings instruments have a higher guaranteed rate of return, but you have to hold them for specific periods of time, so they are not as liquid.

# Why Do We Invest Money?



- Investing can be another way to “pay yourself first.”
- Investing - putting money some place with the intention of making financial gain.
  - Offer higher financial gains, but at a higher risk than savings.
- Risk – chance of losing some or all of the money you invested.

# Why Do We Invest Money?



- 🏆 Is your “savings goal” seven or more years away? Investing is a good way to make money.
- 🏆 Or is your “savings goal” less than seven years away? Probably better to put your money in a savings account or short-term CD.

# == *Earnings* ==



- 💰 Savings and investing are two ways to reach your financial goals.
- 💰 Both involve commitment to setting aside money for future needs or goals.
- 💰 Make “paying yourself first” a regular part of your life.

# ≡ **Balance Sheet** ≡



- 📁 Identify some items that are very liquid.
- 📁 Give an example of an opportunity cost.
- 📁 Explain why it is important to “pay yourself first.”
- 📁 What are the differences between savings and investing?

## == *Paid in Full* ==



👛 Two months passed and Micah and his mom drove downtown to the dealer.

👛 No, the car was not new, but it was HIS! And he did not owe anything on it.

👛 Now he could start saving for that new speaker system.







# **Standard 5. 2**

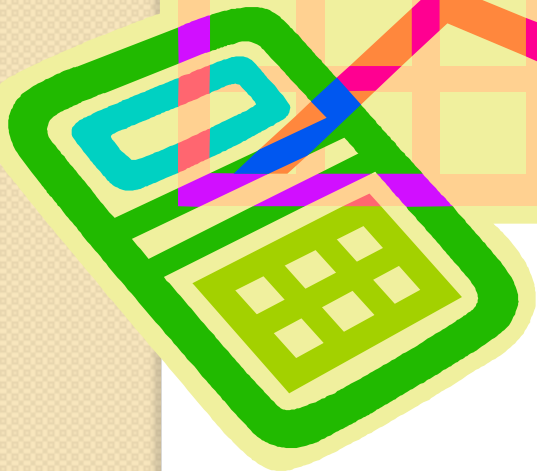
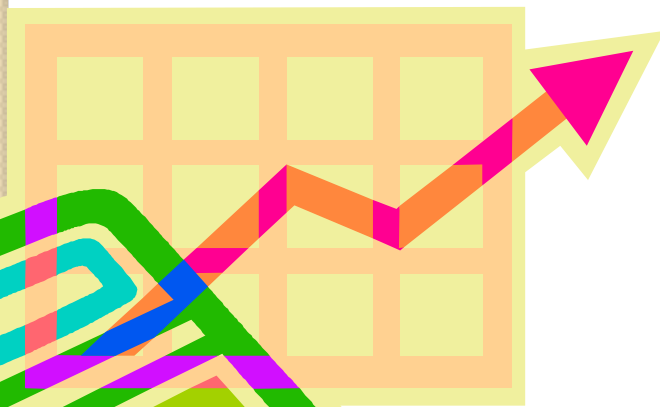
## **Savings and Investing**

### **The Rule Of 72**

# = *Payoff* =



- 💰 Compare simple and compound interest.
- 💰 Calculate simple and compound interest.
- 💰 Apply the Rule of 72 to determine how much time is needed for savings/ investments to double.



# Down Payment



- 👛 Micah is saving for a new speaker system that costs \$287.48.
- 👛 He has a few dollars in his savings account, and his birthday is next week.
- 👛 He hears that Johnson's Appliances is closing and that he could earn \$100 in just one weekend helping with their auction.

# Down Payment



- 💰 With the balance of his savings account, the \$100 and his birthday cash, he would be half way there.
- 💰 How long will it take him to double the money in his savings account?



# == Cache ==



💰 Compound Interest

💰 Principal

💰 Rule of 72

💰 Simple Interest

# == Building Interest ==



- 💰 Why do we earn interest when we put our money in to the bank?
- 💰 How is interest calculated?
- 💰 What is the “Rule of 72?”

INTEREST

# Calculating Interest



## Interest:

- Paid when someone else uses your money.
- Higher the risk, the greater the return.

## Two methods for calculating interest:

- Simple interest
- Compound interest

## Simple Interest Formula:

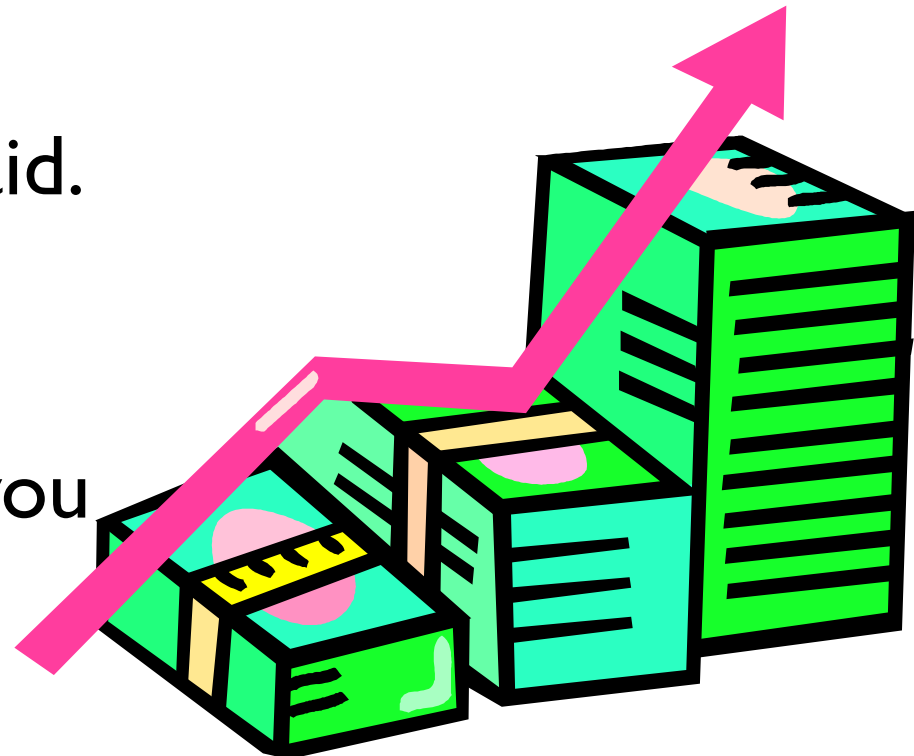
- Principle  $\times$  interest  $\times$  number of years

# Calculating Interest



## Compound Interest


- Calculated on money you invest or loan, plus any interest already paid.
- The longer the money is invested, the more impact you will receive from compounding.





# The Rule of 72



-  The Rule of 72:
- 72 divided by the expected rate of return equals the number of years it will take the investment to double.



# == Earnings ==

💡 Compounding interest explains why it is important to start saving NOW!



💡 Understanding how to get your money to work for you will help you to get the most of your savings.

# **Balance Sheet**



- 📈 How do you calculate simple interest?
- 📈 How do you calculate compound interest?
- 📈 Which form of interest provides the greater return?

## == *Paid in Full* ==



- 👛 Micah's saving account pays an interest rate of 4%.
- 👛 72 divided by 4 equals 18 years.
- 👛 Do you think Micah really wants to wait 18 years to buy his surround sound system?  
Probably not!

## == *Paid in Full* ==



👛 The Rule of 72 assumes Micah will not add any more money to his savings account. If he continues adding money, the power of compounding interest will help him meet his goal much sooner.



# **Standard 5.3**

## **Savings and Investing**

### **Savings and Investing**

### **Tools**

# == Payoff ==



- 📈 Examine availability of variety of savings and investment products.
- 📈 Compare costs (risk) and benefits (rate of return) of different savings and investment products and strategies.

# Down Payment



- 👤 Miley and Hanna are turning 16 this year.
- 👤 Miley's parents started a savings account for her college education right after she was born and her dad has \$50 automatically deposited in the account each month.





# Down Payment

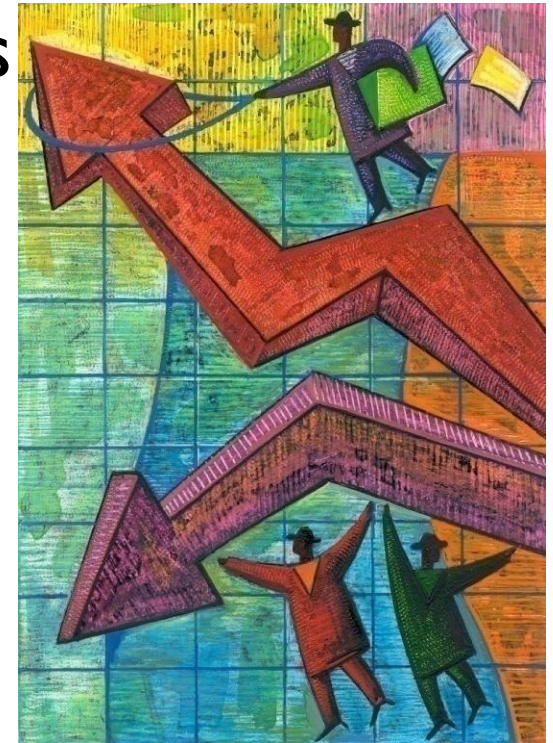


- 👤 Hanna's parents opened a college savings plan on her first birthday. Her account is a mutual fund with a diversified stock portfolio. Her dad also has \$50 a month automatically deposited in the account.
- 👤 Which girl do you think has the most money in her college account?
- 👤 Which parent made the best choice?

# == Cache ==



- 💰 Certificates of deposit
- 💰 Corporate bonds
- 💰 Money Market Mutual Funds
- 💰 Mutual Funds
- 💰 Rate of Return
- 💰 Risk
- 💰 Savings accounts
- 💰 Savings bonds
- 💰 Stocks



# ≡ *Building Interest* ≡



- 💰 What options or strategies are available for savings?
- 💰 What options or strategies are available for investing?

# Saving Strategies



## Savings Account

- Interest bearing
- Usually have low interest rates
- Best for small deposits needed for meeting short-term goals

## Certificate of Deposit

- A CD requires a certain amount of time to mature.
- The longer the term of maturity, the higher interest rate you will receive

# Saving Strategies



## Certificate of Deposit – continued

- CDs are less liquid than savings accounts

## Government Savings Bonds

- Backed by the U. S. Government.
- Have little or no default risk.
- Designed to be held a minimum number of years.
- Because of the length of maturity, government bonds have a higher rate of return than savings accounts or CDs.

# Saving Strategies



## Money Market Mutual Funds

- These are invested in very short-term investments with low risk.
- Banks and credit unions insure through FDIC, while other institutions do not.
- Uninsured accounts generally pay a higher interest rate because of additional risk.



# Saving Strategies



## Checking Accounts

- NOT for saving money. However, some pay a very small percentage rate of interest.
- Before opening a checking account, ask about the rate of interest your money will earn.



# Investing Strategies



Investment options are generally higher risk than savings options, but also offer a higher rate of return.

## Mutual Funds

Investors pool money to buy shares of a fund that invests in many financial products (stocks, bonds, and securities).



# Investing Strategies



## Mutual Funds – continued

- Great for people with limited funds or knowledge about investing.
- Have professional money managers who closely monitor accounts.
- Rate of return is affected by a variety of economic factors that can vary over time.

# Investing Strategies



## Mutual Funds – continued

- Highly recommend by financial experts because potential benefit of gains is greater than potential costs of losing.

## Stocks

- Stocks allow partial ownership in a company.
- Owning stock carries more risk than mutual funds.

# Investing Strategies



## Stocks – continued

- Advisable to diversify your portfolio and spread your risk.
- Investors should own at least ten different single stocks in different industries.

## Corporate Bonds

- When you own a corporate bond, you are basically loaning money to a company.

# Investing Strategies



## 🏦 Corporate Bonds - continued

- The interest you receive is the value of your investment.
- If something happens to the company, you can lose most or all of your money.
- Investing in bonds is a lower risk option with lower returns on your investment.

# Rates of Return



- 🍷 Rate of return - amount of money you can earn when saving and investing.
- 🍷 The higher the average return, the more risk you are taking as an investor.

Asset Class	Rate of Return*
Common stocks	10%-13%
Stocks of smaller companies	14%-16%
Long term corporate bonds	6.5%-8%
Long term US government bonds	5%-7.5%
Short term US Treasury bills	3.5%-5%

\*Average rate of return since 1926, Ibbotson and Associates

# == *Earnings* ==



- 🏠 The choice of best savings and investment products depends on how you need to use the money.
  - Savings is best suited for meeting short-term goals.
  - Investments are more appropriate for meeting long-term goals.
- 🏠 Building a diverse portfolio helps to manage your savings and investment risks and adds to your return.

# **Balance Sheet**



- 💰 What kind of savings or investing strategies can help you meet short-term goals?
- 💰 What kind of savings or investing strategies can help you meet long-term goals?
- 💰 Explain the difference in risk to savings versus savings.
- 💰 Which is more important, long-term goals or short-term savings?

## == ***Paid in Full*** ==



- 💰 So, who has the most money for college: Miley or Hanna? If you said Hanna, you are correct! Her parents made the best choice for reaching their long-term goal.
- 💰 Miley's savings account earned an average of 3% interest for the past 16 years.
- 💰 Hanna's mutual fund earned an average of 12% for the past 15 years.





# **Standard 5.4**

## **Savings and Investing**

### **Time Is Money**

# = *Payoff* =



- 👛 Determine how various saving and investment strategies vary by an individual's needs and circumstances.
- 👛 Evaluate the impact of inflation on future earnings, savings, and investments.
- 👛 Identify the different types of saving and investment products required to meet financial goals.

# Down Payment



- 🍷 Aunt May and Uncle Augusto stop at April's house for a few days.
- 🍷 That night over dinner, they ask April's dad if he is worried about the stock market.
- 🍷 Dad says he has 15 years until retirement, so he is waiting to see what happens before making changes in his retirement account at work.

# Down Payment



- 👤 Uncle Augusto wants to move his money into something “safer” just in case the market drops. He cautions April’s Dad about losing his money.
- 👤 April is taking an investment course at school, and she says they both are right!
- 👤 What do you think about April’s answer?

# == Cache ==



- 💰 Asset Class
- 💰 Diversification
- 💰 Equities
- 💰 Fixed Income Class
- 💰 Inflation
- 💰 Risk Tolerance
- 💰 Time Horizon



# Building Interest



- 💧 Why do people make different choices?
- 💧 What would be the impact if **EVERYONE** made identical choices?



# Time Factors



- 🕒 Time is one of the most important factors to consider when making decisions about savings or investing.
- 🕒 The longer your “time horizon,” the more aggressively you can invest your money.

# Time Factors



📁 List of asset classes, from **least** to **more risky**:


Fixed Income Items		
	Bank Accounts	Immediate access to cash, insured
	Certificates of Deposits	Time varies based on contract, insured
	Government Bonds	Money loaned to U. S. Government
	Municipal Bonds	Money loaned to a municipality
	Corporate Bonds	Money loaned to a business corporation



# Time Factors



Equity Items		
	Large Cap Stocks	Ownership in large companies
	Small Cap Stocks	Ownership in small companies
	International Stocks	Ownership in international companies
	Commodities	Ownership of hard assets
	Microcap Stocks	Ownership in very small companies with a high rate of failure

 In general, fixed income items are associated with “loaning” your money to someone else.

# Time Factors

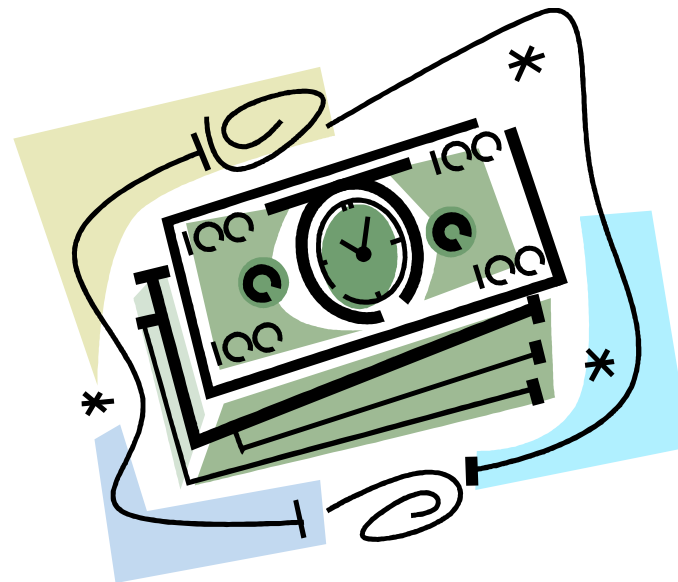


- 📌 Fixed income items tend to have low risk, and therefore, pay lower interest rates.
- 📌 Equities are generally associated with “ownership.”
- 📌 Financial experts recommend equities as the better option if you have at least seven years until your financial goal.

# Time Factors



- If you have less than seven years to meet your financial goal, then it is best to “diversify” your investments to include some fixed income products.



# Risk Factors



- Risk tolerance relates to how much negative change or potential for loss you can handle with your investment.
- Portfolio is a common name given to all of your personal assets.
- Losses in your portfolio can be difficult to replace.



# Risk Factors



- That is the reason most financial experts recommend investments with less risk to meet short-term goals.
- Choosing low risk investments to meet long-term goals is not the best option.
- Low risk savings and investments have less potential for growth than equity items, which could leave you short of your long-term goals.

# Inflation Factors



- Leaving unspent money in a non-interest bearing checking account can result in a loss of money.
- Inflation - increases in average prices of goods and services from one year to the next.
- If you are not earning interest, your savings may not keep up with future prices.



# == *Earnings* ==



- 💰 Lots of options are available for saving and investing your money.
- 💰 Remember to consider the following in making your choices:
  - Time horizons,
  - Risk tolerance, and
  - The impact of inflation.



# == *Balance Sheet* ==



- 💰 How do “time factors” affect investments?
- 💰 Explain the difference between fixed income and equity assets.
- 💰 What risk factors should be considered when planning your portfolio?
- 💰 Why should you consider inflation when investing for the future?



## == *Paid in Full* ==



💰 If you agree with April, then you are right too!

💰 Uncle Augusto and Aunt May might want to consider other options for their money because the stock market is high risk when you have an immediate need for your money.



## == ***Paid in Full*** ==



👤 Dad is also right. He will not be using the money in his retirement account for 15 years. His investment has time to recover from any fluctuations in the market.