



Investing Tips

LESSON 18: STUDENT ACTIVITY SHEET 1

| Investment Strategy | Definition | Risk | Pros | Cons |
|---------------------|--|--|--|--|
| Bonds | A type of loan in which you are the lender. You loan money to the government or a corporation with a set interest rate and maturity date | Often lower risk, but risk varies depending on 1) the ability of the issuer to repay the loan and 2) interest rate opportunity costs | <ul style="list-style-type: none"> - Usually provides more stability than stocks - Higher interest rate than a savings account | <ul style="list-style-type: none"> - Historically lower returns than stocks - Cashing in before maturity date could result in a loss of principal |
| Mutual Funds | A fund managed by a company that includes a portfolio of stocks or bonds | Risk varies depending on type of mutual fund | <ul style="list-style-type: none"> - Diversified - You can select different risk levels | <ul style="list-style-type: none"> - Return isn't guaranteed - Can be subject to expensive management fees |
| Stocks | When buying a stock, you buy partial ownership of a company | Different levels of risk—some can be very risky, but all stocks are subject to ups and downs of the market | <ul style="list-style-type: none"> - Potential for higher returns over the long-term | <ul style="list-style-type: none"> - The market goes up and down regularly, making it a volatile investment - Requires a long-term investment to get the best return - No guarantee for additional money above your investment (called the return) and you may lose your principal, too |



What's My Interest?

LESSON 18: STUDENT ACTIVITY SHEET 2

If you could earn \$100 or \$10 for doing the same job, which would you take? Chances are, you'd take the \$100. While that seems like an easy choice, understanding how you can earn \$100 versus \$10 when investing money means mastering interest and rate of return. Learn how different rates, interest types and investment strategies can impact and maximize your earnings by completing the table and questions below.

How to Calculate Simple Interest:

$$A = P(1 + rt)$$

A= Amount

P= Principal

r= Interest rate (decimal)

t= Time (years)

Simple Interest/Rate of Return Example:

Imagine you have \$100 and plan to put it in the bank for 6 years with a 6% interest rate, calculated as .06%. Here's what the calculation would look like:

$$100(1 + .06 \times 6) = \$136$$

The interest is \$36. If you invested \$100, you would have \$136 after 6 years.

How to Calculate Compound Interest:

$$A = P(1 + r/n)^{nt}$$

A= Amount

P= Principal

r= Interest rate (decimal)

n= Number of times interest is compounded per year

t= Time (years)

Compound Interest/Rate of Return Example:

Imagine the same scenario (\$100, interest rate calculated as .06% for 6 years), but this time interest will be compounded annually. Here's how your money grows:

$$A = 100(1 + .06/6)^{6 \times 6}$$

$$A = 100(1.06)^6$$

$$A = 100 \times 1.4185$$

$$A = \$141.85$$

- To determine the compound interest quickly, try $100 \times (1 + .06)^6$. Your answer is still \$141.85!

| Strategy | Principal | Interest Rate | Time | Interest or Return Type | Interest or Return Earned | Total Value |
|---|-----------|---------------|----------|-------------------------|---------------------------|-------------|
| Stock | \$10,000 | 3 % | 10 years | Compound | | |
| Mutual Fund (portfolio of stocks & bonds) | \$1,000 | 7 % | 20 years | Compound | | |
| Bond | \$100 | 5 % | 30 years | Simple | | |
| Stock | \$700 | 10 % | 1 year | Compound | | |
| Bond | \$10,000 | 3 % | 10 years | Simple | | |

Continued on the next page.



What's My Interest?

LESSON 18: STUDENT ACTIVITY SHEET 2

Investment Challenge

1. John receives \$1,000 as a graduation gift from his grandparents. Rather than spend it, he decides to invest it in a two-year bond that earns 3% simple interest. John doesn't need access to the money right away because he wants to save it for when he's ready to buy a home in about 10 years. Is the bond a wise investment for John? Why or why not? What other investment options does John have?

2. If you had the choice between investing \$1,000 in a mutual fund that earns 7.5% compound interest or a bond that earns simple interest at 7.5%, which would you prefer and why?

