

WEEKLY HIGH SCHOOL LESSON

#KEEPLARNING



Junior
Achievement®
of Oregon & SW Washington



Week Two: Making Healthy Choices; Interest Makes Interest

Overview: This lesson is intended to help students understand interest and gain healthy decision making skills when it comes to savings and debt.

Preparation: Review the activity and session materials. Make sure your student has all the needed materials to complete the lesson.

Recommended Time: 30-45 mins

Materials:

Computer/Tablet with Internet

Printer (recommended but not required)

Paper

Writing Utensil

1) Presentation: Ask your students what interest is. If they don't already know, share with them a little bit about what interest is and how it works. Interest is the cost of using somebody else's money. When you borrow money, you pay interest. When you lend money, you earn interest. (With savings, you would earn interest, with debt, you would pay interest). Ask your students: What is the difference between simple and compound interest? (Simple interest is calculated on the principal, or original, amount of a loan. Compound interest is calculated on the principal amount + accumulated interest of previous periods, and can thus be regarded as "interest on interest"). If this feels confusing, skip to the video linked below.



Junior
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Inspiring Tomorrows™

High School
Week Two

Vocabulary:

- **Interest:** the cost of using somebody else's money
- **Savings:** money put aside to use at a later date
- **Debt:** money you owe
- **Roth IRA:** an individual retirement account allowing a person to set aside after-tax income up to a specified amount each year. Both earnings on the account and withdrawals after age 59½ are tax-free
- **Certificate of Deposit (CD):** a certificate issued by a bank to a person depositing money for a specified length of time
- **401(K):** a qualified retirement plan that allows eligible employees of a company to save and invest for their own retirement on a tax deferred basis. Only an employer is allowed to sponsor a 401(k) for their employees
- **Mortgage:** debt an individual takes out in order to pay for the purchase of a house
- **Simple Interest:** interest calculated on original loan amount, not compounded
- **Compound Interest:** interest calculated on total amount, including accumulated interest; interest on interest
- **Principal:** original sum of money borrowed in a loan or put into an investment

2) **Watch:** Have your students watch the video of Compound Interest Explained.

[Click here to watch video](#)

3) **Brainstorm:** With your students, spend some time talking and thinking about different items that earn interest. Savings and debt both earn interest. With money you're saving, you earn the interest; with debt you have, you have to pay interest. Use the chart below to talk about different types of items on which interest accumulates. Directions: Click on the chart below. Look at the items listed that accumulate interest. Fill in the blanks in each column. Write if you earn interest or pay interest on that type of item. Write if this item would be calculated with simple or compound interest. Write an estimate for what percent interest that type would accumulate. If your student doesn't know if the item accumulates simple or compound interest or what percent interest would accumulate, use a search engine to help.

[Click here for Brainstorming Worksheet](#)

[Click here for worksheet answer key](#)

4) Activity: Calculating Compound Interest

Have your student look at the table and directions below. If you saved \$10,000 starting at age 25 or \$10,000 starting at 35, what is the difference between the amount of money you'd have by the time you were 45?

[Click here for Calculating Compound Interest Worksheet](#)

Next, you'll calculate compound interest on your own. Read the directions on the worksheet below. Go to this website. Decide on a theoretical amount of money you would want to save each month to use in these calculations. Write that amount in the shaded "Monthly Addition" column. Using that number and the variables on the worksheet, type in the amounts to the calculator on the website. Write down the total amounts.

[Click here for Watch Your Money Grow Worksheet](#)

[Click here for worksheet answer key.](#)

5) Discussion:

Ask the following questions. You can ask them verbally or have them write out their answers.

- What is interest?
- Is interest a good thing or a bad thing?
- Would you prefer to save money in an account with simple interest or compound interest?
- With money you borrow (debt), will you pay back the same amount you borrowed?
- Would you end up with more money by the time you're 30 if you save \$1,000 in account with compound interest starting right now or starting after you graduate college?

The Money JAR - Did you know that there is a difference between a scholarship and a grant, and that difference can affect the money you receive from your chosen school? Todd and Evan talk with college planner Beatrice Schultz to discuss an important topic on every college bound student and parents' mind: how to pay for college. [Click here](#) to listen to this week's episode of the Money JAR podcast - **Paying for College**.

Bonus Activity! Calculating the Cost of an Auto Loan

Extended Activity: 30 min

Materials:

Computer/Tablet with Internet

Printer (recommended but not required)

Paper

Writing Utensil

Directions:

- Click here for [Comparing Auto Financing Options Worksheet](#).
- Read through each section on the first page with your student.
- On the second page, follow directions for how to calculate loan payments.
- Have your student calculate payments with three different sets of variable examples on the bottom of second page.
- Have your student chose a real car to calculate payments for. This could be their own car, your family car, a dream car (Ferrari, Tesla, VW Beetle, ect...?), or any car they chose. Use a search engine to find the approximate total cost of that car.
- Have your student use the same equation and steps to calculate the monthly payments for the car they chose with the three different sets of variable examples on the bottom of the second page of the worksheet. If you're able, you can use this opportunity to talk to your student about experience you've had with car loans, what your monthly payments are (if you have an auto loan), etc.