



THE ART OF NAVIGATING FINANCE



Introduction to Finance & Responsible Consumerism

A 16-LESSON FINANCE LAB FOR EXPLORING MONETARY SYSTEMS & CONSUMERISM THROUGH READING & ACTIVITIES



Lesson 10

SAVE & SPEND:

HOW INTEREST-ING: EXPLORING INTEREST

We discussed how long-term savings goals are essential in order to afford large purchases and we defined interest in the previous lesson. Now it is time to look at different types of interest and how compound interest is what helps us accelerate the value of our long-term savings. We can begin by introducing you to three basic terms relating to interest.

Principle: The amount of money in which interest is calculated and paid.

Interest rate: In savings, an interest rate is the percentage at which a bank or other financial institution pays a saver for keeping their money with them. This is typically an annual percentage rate or APR.

Simple interest: This is interest earned only on the principle amount.

Compound interest: This is the interest earned on the principle amount plus past interest earned.

This chart below shows the difference between calculations of simple interest and compound interest at a 5% APR rate.

	Simple Interest		Compound Interest	
Initial deposit	\$100	+\$5.00	\$100	+\$5.00
End of year 1	\$105	+\$5.00	\$105	+\$5.25
End of year 2	\$110	+\$5.00	\$110.25	+\$5.51
End of year 3	\$115	+\$5.00	\$115.76	+\$5.79
End of year 4	\$120	+\$5.00	\$121.55	+\$6.08
End of year 5	\$125		\$127.63	

The interest is 5% each year, calculated only on the initial principle

The interest is 5% each year, calculated on the initial principle plus the interest from the previous year

Exploring interest is best done in a hands-on way, so let's dive in!

TRY THIS! Let's compare what happens when you invest the same amount of money in two different investments, one with simple interest, and the other with compound interest. Time for some calculation fun!

There are two future alternate universe versions of yourself, Self One and Self Two. Both of them are super cool, as you would expect, but Self One was super distracted when they chose to place their money in an account and picked the simple interest account because "simply" sounded good, no fuss! Self Two really paid attention to their finance lessons and decided the compound interest account was the best choice. Your job is to use the graph on the following page and the information provided to calculate Self One and Self Two's yearly interest and then graph the data you collect in either an overlapped bar graph or line graph. Analyze what you see and decided who made the better choice.



SELF ONE

Initial deposit: **\$100**

Interest Rate: **5% APR simple interest** (non-compounding)

Investment term: **30 years**

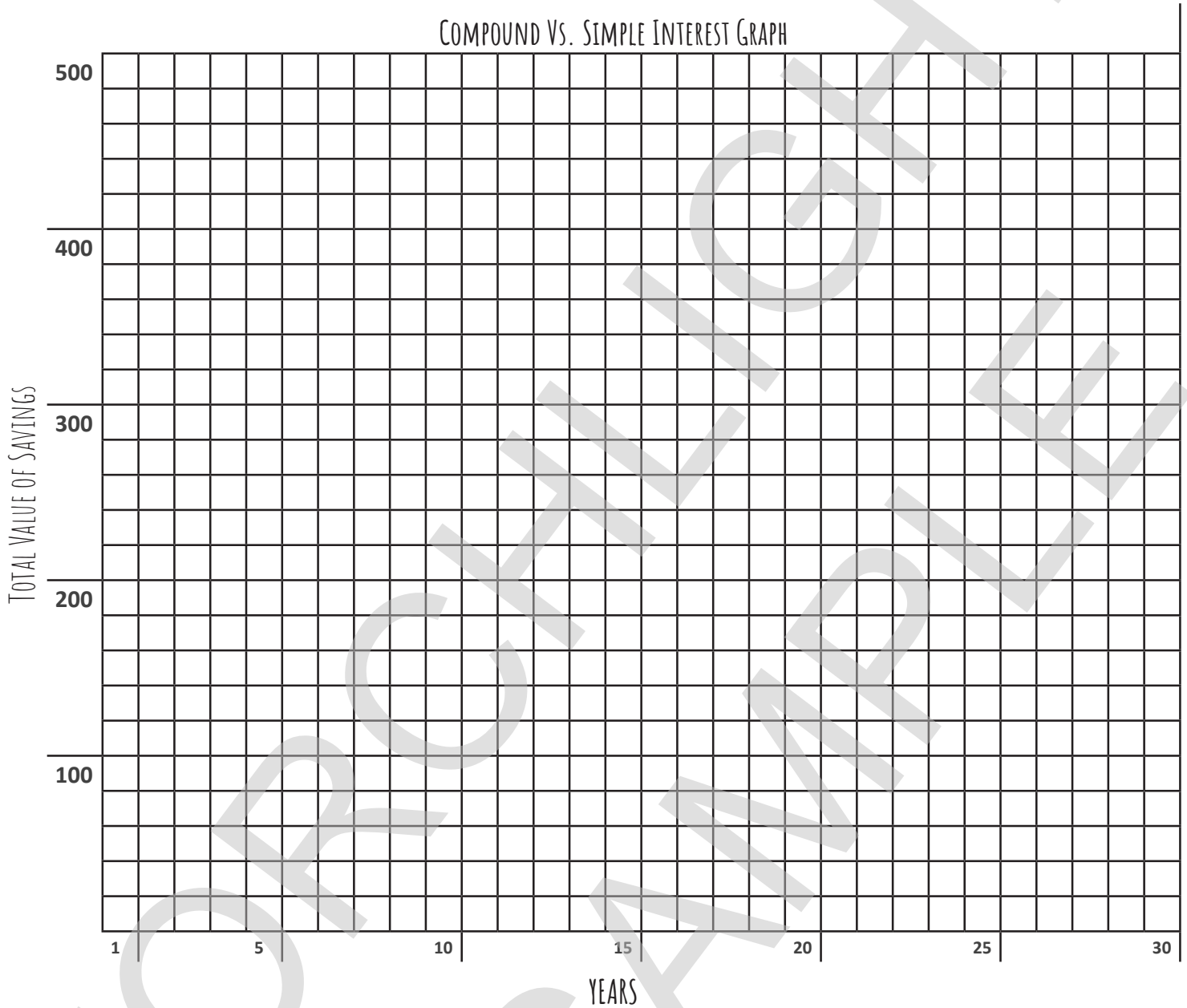
SELF TWO

Initial deposit: **\$100**

Interest Rate: **5% APR compound interest**

Investment term: **30 years**

COMPOUND VS. SIMPLE INTEREST GRAPH



Which version of your alternate universe self made the best choice? _____

Why? _____



You now have a good amount of practice with calculating interest. There is another factor that has a heavy impact on the efficiency of your savings and investments and that factor is time! What does that mean? It means more graphing fun! I can feel your excitement match my own!

In this next graph we will compare your future alternate universe self that started saving early (Self Three) and the version of you that waited (Self Four) to see what kind of difference that made in their (your) compound interest.

SELF THREE

Initial deposit: **\$1000**

Interest Rate: **5% APR compound interest**

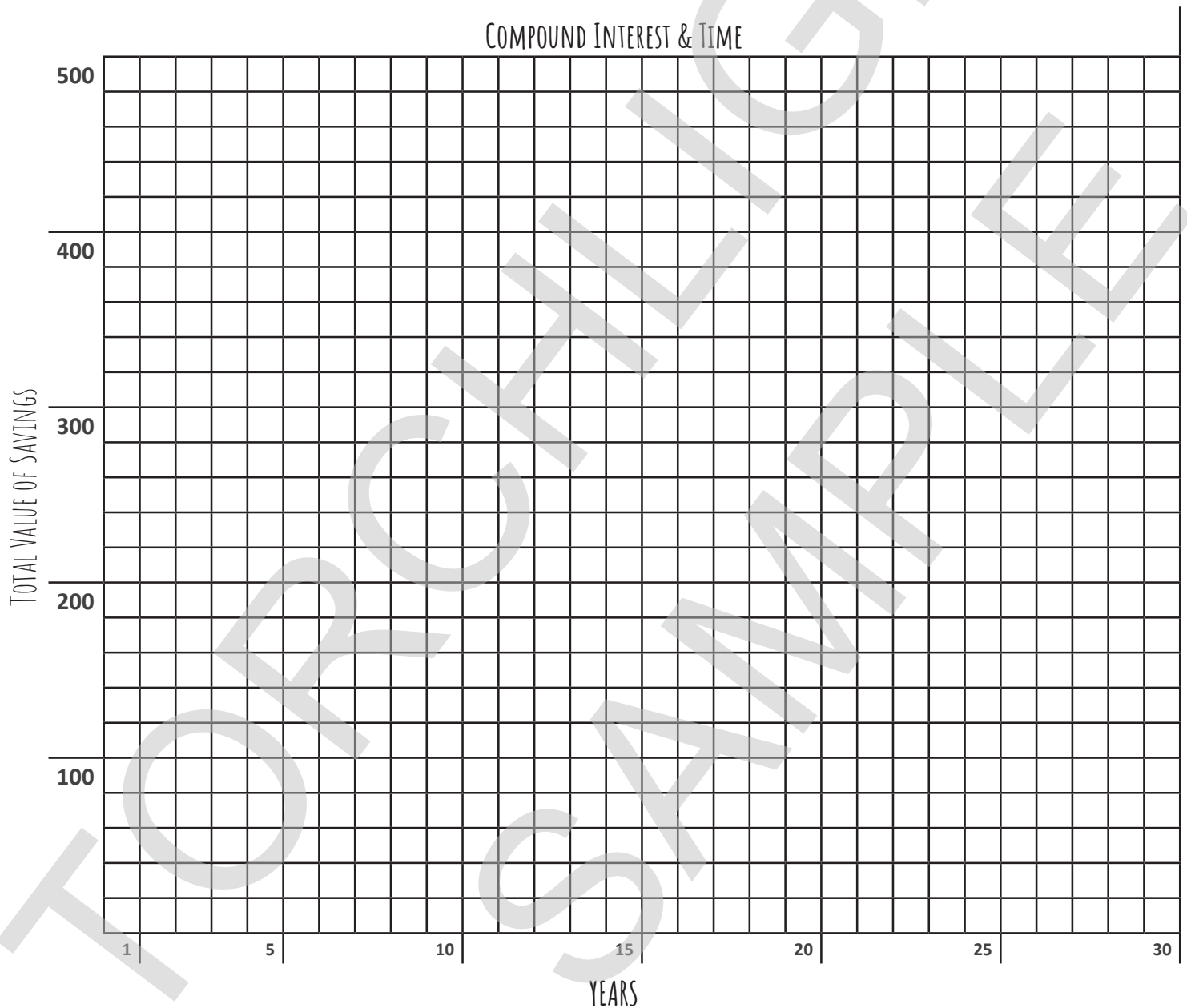
Investment term: **30 years**

SELF FOUR

Initial deposit: **\$1000**

Interest Rate: **5% APR compound interest**

Investment term: **15 years** (started 15 years after Self Four)



Hopefully these two graphing activities helped you clearly see a couple things. First, that compound interest pays better than simple interest, so if you have a choice, choosing a savings or investing option with compound interest will “pay off” in the future! Secondly, we hope you can see the effects of time on savings. The sooner you get started, the better your savings will grow. If you didn’t include a line item for savings in your spending plan, you might want to revisit that. Putting small and consistent amounts from your income into a savings account with a reasonable interest yield as soon as you can manage is always a good plan! It is a way to earn money without doing anything, other than not spending it. There are other ways, such as investment, to earn possibly better returns, but those include higher *risk* and will not be available to you until you’re a bit older, so for now you can look to the following options:

Note: While most young people under 18 cannot invest or open the accounts listed below, adults may purchase and open these accounts for them, if both parties agree.

ONLINE BANKS

These banks are online only and tend to offer higher interest rates because they do not have the high costs of running a brick and mortar business.

CDs

“CD” stands for certificate of deposit. This kind of savings allows you to make a fixed interest rate for a fixed amount (your initial deposit) over a fixed amount of time. They typically offer slightly higher interest rates than standard savings accounts. Most CDs offer terms for 6 months, 1 year, and 5 years.

BONDS

Put simply, bonds are reverse loans! Instead of you borrowing money from the bank, you are loaning money to a business or the government with the promise they will pay you back more than you loaned them!

Before we move onto Taxes in our next lesson:



Read Money for Beginners, pp. 82—87 to round out our studies on saving and spending with fundraising, philanthropy, and giving.



EXTENSIONS

▶ Watch (Please vet all films for age-appropriate content before watching with learners)

- It’s a Money Thing: Understanding Compound Interest <https://www.tlcr.bz/ANF-18>
- What is Compound Interest by Canstar <https://www.tlcr.bz/ANF-19>



HOW DOES IT WORK?: ADVERTISING

We're bombarded with advertising and messaging in our everyday lives. Once they understand the basics of money management, young people need to make sound, practical decisions about their money in light of complex and sometimes confusing consumer messages and choices. Talking to children about advertising from an early age encourages them to become active—not passive—consumers of commercial messages and helps equip them to make informed decisions.

An advertisers' job is to sell their company's products. Sadly, many advertisers play on human insecurities to accomplish this goal. By creating ads that imply their products will improve our lives and bring us happiness, they actively tell viewers that their lives are missing something. This can take the form of beauty advertisers alluding to people not being enough without their products or ads that play on our emotions by making us feel like we are not as satisfied as we could be if only we purchased their product.

TRY THIS! Have your learner make a list of the things they value. Then have them make a list of the things they wish they could buy. Compare the valued items list with the desires. Have your learner justify why each item has meaning on the valued list and why they want the items on the desired list. Ask them to evaluate the following:

Do you think the stuff on the wish list will bring you happiness? If so, why?
Do you see a difference between the items on the list of things you value and the list of things you desire?

In most cases, learners value items with meaning, such as a happy memory of time spent with a loved one or an important event that makes them feel a strong emotion. The desired items tend to mimic the advertiser's messaging. If this is the case for your learner, help them make this connection.

Discuss the idea that buying desired items is not inherently wrong. We might make strong memories around some of these things if they make their way into our lives, but what tends to be important are not the items but the events, emotions, and relationships we develop, and we need to keep this in mind when choosing where to spend our income.

TRY THIS! Present the following ads to your learner and discuss each ad using the following discussion prompts to evaluate these ads and any other ads you see throughout the week and beyond.

- What is the ad trying to sell us?
- Are they playing on our emotions or insecurities to get us to purchase? If so, how are they accomplishing this?
- Do they imply we are not enough as we are?
- Do they imply there is something wrong with us if we are not like the actor(s) or model(s) in the ads?
- How does the ad make you feel?
- Does the ad make you want something? What is it? Why do you want it after seeing this ad?
- Are they trying to manipulate me into thinking a certain way? What do they want me to think?
- Who is responsible for the ad and what are they gaining from it?



You don't have to settle for less than perfect.

- What is the ad trying to sell us? **Skin products.**
- Are they playing on our emotions or insecurities to get us to purchase? If so, how are they accomplishing this? **Yes! They are showing a person without makeup and acne present on their skin using their product, then showing the same person with makeup and no acne on their skin with the tagline, "You don't have to settle for less than perfect." This implies that the person on the left with no makeup and acne is imperfect, and the person on the right with makeup and no acne is perfect.**
- Do they imply we are not enough as we are? **They are drawing a false parallel between skin's appearance and value, which is meant to play on people's insecurities around their appearance and make them desire their product.**
- Do they imply something is wrong with us if we are not like the actor(s) or model(s) in the ads? **Yes, they suggest that if we look more like the person on the left, we are imperfect or not good enough.**
- How does the ad make you feel? **Answers will vary.**

- Does the ad make you want something? What is it? Why do you want it after seeing this ad? **Answers will vary, but if the answer is, “yes, I feel like my skin needs to be like the person on the right,” then help your learner unpack what the advertisement is doing so your learner can see through ads such as this, which they will surely come across en masse along their lifetime.**
- Are they trying to manipulate me into thinking a certain way? What do they want me to think? **They are trying to make you feel lesser than the person on the right. Therefore they hope you will be driven to purchase their products.**
- Who is responsible for the ad, and what are they gaining from it? **Perfectaclear is responsible, and they will gain sales and profit.**



- What is the ad trying to sell us? **At first, you might think they are trying to market being an astronaut as a career. If you skip to our last question (Who is responsible for this ad?), you will see the Apple Farmers Association of America, and suddenly it becomes clear, they are selling apples!**
- Are they playing on our emotions or insecurities to get us to purchase? If so, how are they accomplishing this? **This is a tough one! But let's ask ourselves, why didn't they just feature a regular kid eating apples? Why an astronaut? Are astronauts ordinary people, or does our society consider them special? If you said special, you are right. Many consider them “the best of the best” because it requires dedication, skill, and bravery. So, now ask yourself again, are they playing on my emotions or insecurities? For some of us, yes. This ad says that we are not yet as special as astronauts, but they are betting that we want to be, so by telling you astronauts eat their apples, they are betting that you will want to eat apples too!**
- Do they imply we are not enough as we are? **This ad tells us to aim for more than we already are unless you are already an astronaut!**
- Do they imply something is wrong with us if we are not like the actor(s) or model(s) in the ads? **Not necessarily. They are just betting we will desire to be more than we are.**
- How does the ad make you feel? **Answers will vary.**
- Does the ad make you want something? What is it? Why do you want it after seeing this ad? **Answers will vary, but if the answer is, “yes, I want to be great, like an astronaut, and astronauts eat their apples,” then it accomplished its goal of making apples cool and desirable.**
- Are they trying to manipulate me into thinking a certain way? What do they want me to think? **This ad is aiming to get you to think great people are great partly because they eat apples!**
- Who is responsible for the ad, and what are they gaining from it? **As mentioned in the first question, the ad is sponsored by the Apple Farmers Association of America, and if they can make apples cool to eat, they will sell more apples!**





- What is the ad trying to sell us? **Eatables, prepared and packaged food.**
- Are they playing on our emotions or insecurities to get us to purchase? If so, how are they accomplishing this? **They are showing us kids having fun with friends and looking free and happy. For young people, this might make them want to be like these kids. This ad might make parents feel like they want their kids to be like these kids as well, but there is an added layer to this advertisement! Notice the tagline, "Fun & Natural come together." This tagline is directed at parents. It is intended to create a correlation between having fun and eating "natural" food. They take this even further by showing the kids outside, in nature. Lately, many products have started using the term "natural" to imply that anything not from nature is lesser than. But, what is natural? And is natural always good? Hurricanes, poison, and air are all natural. Being natural is not inherently good or bad, and using nature as a value indicator of good is dishonest. The same goes for the food within the product; cheese, pepperoni, and crackers. All of these things take processing to be created by humans. Processes are not inherently bad or good either, so food cannot be good or bad simply by calling it natural.**
- Do they imply we are not enough as we are? **Not necessarily, but they are setting a standard for happiness.**
- Do they imply something is wrong with us if we are not like the actor(s) or model(s) in the ads? **Again, not necessarily. They are making a lot of false equivalencies, though.**
- How does the ad make you feel? **Answers will vary.**
- Does the ad make you want something? What is it? Why do you want it after seeing this ad? **Answers will vary, but if the answer is, "yes, I want an Eatables because it looks fun," then it has accomplished its goals.**
- Are they trying to manipulate me into thinking a certain way? What do they want me to think? **This ad is hoping to make you think that eating Eatables will be fun and good for you.**
- Who is responsible for the ad, and what are they gaining from it? **The company that makes Eatables is responsible. They will gain profit from Eatables sales.**

If you can unpack ads as we did here, you can see through the advertisers, and suddenly, instead of being manipulated by advertisements, you are free to make more informed decisions based on what is the right choice for you.

For a deeper dive into historical ads, you can read this article, view these outdated and predatory advertisements, and discuss what emotions these manipulated to sell a product. Pay particular attention to the Blatz Beer ad and Marlboro cigarette ad with the babies. Although there is a baby in the ad, who is the ad actually marketing to? This might be pretty clear to mothers, but kids might not see the connection right away. They are playing on the mothers' emotions in this ad, showing the baby's approval and implying that smoking their cigarettes or drinking their beer will make the woman a better mother. <https://www.tlcr.bz/ANF-24>