## Name: <br> Date:

## (1) INTRO

## WOULD YOU RATHER...?

| Keep a $\$ 100$ prize? $\quad$ OR $\quad$Trade in your $\$ 100$ prize <br> for a mystery box that will <br> contain EITHER $\$ 50, \$ 75$, <br> $\$ 150$, or $\$ 200 ?$ |
| :---: |

1. Write an explanation of your selection in the box below. Then, discuss your choice and reasoning with a partner.
$\square$
(1) LEARN IT

## VIDEO: The Difference Between Saving and Investing

Some people think saving and investing are the same thing, but while they do have similarities, saving and investing are two very different actions. Watch this short video to learn more about the differences between saving and investing. Then, answer the following questions.

1. Fill out the chart below by listing the characteristics of saving and investing.

| SAVING | INVESTING |
| :--- | :--- |
|  |  |
|  |  |

2. According to the video, saving is "simpler" than investing. Explain why someone may still want to do both.
$\square$
3. In your own words, explain how inflation affects your savings.
$\square$

## ARTICLE: The Magic of Compound Interest

You just learned the difference between saving and investing. Now let's review what compound interest is and how it affects how much money you can earn saving and investing! Read the article and answer the following questions.

## The Magic of Compound Interest

Compound interest is almost like magic. It makes dollars multiply before your eyes.
Let's say you start with $\$ 1,000$ in the bank. If the interest rate is $4 \%$, you'll have $\$ 40$ more in the
account at the end of the year. That's simple interest. But in a year or two, you earn interest not just on the original $\$ 1,000$, but also on the $\$ 40$ in interest you've already earned.

In other words, your interest earns interest. That's compound interest. The amount you receive in interest grows each year as long as you keep your money in the bank.

This same idea works when you invest in stocks. With compounded returns, the money your investments earn one year will earn money for you in following years - as long as you reinvest it.

1. In your own words, explain the difference between simple interest and compound interest.
$\square$
2. Why is time such an important factor when calculating compound interest?
$\square$

## INTERACTIVE: Compound Interest Calculator

You just learned about compound interest! Now let's take a look at how much money you can earn saving vs. investing by using Nerdwallet's compound interest calculator to answer the following questions.

1. Enter the following information into the compound interest calculator to represent a savings account:

Initial Deposit: $\$ 5,000$
Contributions: \$0
Investment Time Span: 30
Estimated Rate of Return: $1.25 \%$
Compound Frequency: Annually
How much is your future balance?
2. Enter the following information into the compound interest calculator to represent investing in the stock market:

Initial Deposit: \$5,000
Contributions: \$0
Investment Time Span: 30
Estimated Rate of Return: 7.00\%
Compound Frequency: Annually

How much is your future balance?
$\square$
3. Based on your calculations does saving or investing offer you higher returns? In your own words, explain why this option earns you more money than the other.
$\square$

## DO IT

## CALCULATE: Compound Interest

Your older sister, Marissa has been working a full-time job for a few years now. She has recently begun thinking about investing for retirement. Help Marissa as she works through a few different financial options for her future! Use the compound interest calculator from the last activity for the retirement scenarios below.

1. Marissa makes an initial deposit of $\$ 1,000$. Her contributions are $\$ 100$ a month for the next 40 years. She chooses not to invest and puts her money into a savings account which earns $2 \%$ interest annually. What is the balance of Marissa's retirement account after 40 years?
2. Marissa makes an initial deposit of $\$ 1,000$. Her contributions are $\$ 100$ a month for the next 40 years. She chooses to invest in the US stock market through an index fund with a $6.5 \%$ return annually. What is the balance of Marissa's retirement account after 40 years?
$\square$
3. Marissa decides she wants to retire early. She makes an initial deposit of $\$ 1,000$. Her contributions are $\$ 500$ a month for the next 15 years. She chooses to invest in the US stock market through an index fund with a $7 \%$ return annually. What is the balance of Marissa's retirement account after 15 years?
$\square$
4. Marissa decides to save AND invest for retirement. She makes an initial deposit of $\$ 2000$ in her savings account which earns $1.5 \%$ annually. Her contributions are $\$ 150$ a month. Then, she makes an initial deposit of $\$ 1,000$ in the US stock market through an index fund contributing $\$ 300$ a month with a $6.8 \%$ return annually. What is the balance of Marissa's retirement account after 30 years?
$\square$
5. Your sister asks for your recommendation based on your calculations. What is your recommendation and why?
$\square$
6. What is one main difference between saving and investing?
7. Your older cousin, James, just got his first job and has some money leftover from his paycheck each month. He wants to put it away for when he retires. Should he SAVE IT or INVEST IT? Explain why.
