

# Student Workbook



GOAL SETTING



DECISION-MAKING



MONEY & INFLATION



ASSET ALLOCATION



DIVERSIFICATION



**THIS WORKBOOK BELONGS TO:**

Name \_\_\_\_\_



# Table of Contents

<p><b>Nikki's Timeline</b></p> <p>Middle School, Seventh Grade</p> 	<p><b>Overview</b> Welcome.....1</p> <p><b>Introduction</b> Meet Nicki.....2</p> <p><b>Goal Setting</b></p> <p><b>Lesson 1</b> Better Get a Budget.....4</p> <p><b>Activity Sheet 1</b> It's in the Budget!.....6</p> <p><b>Notice</b> Note to Reader.....7</p>
<p>High School, Junior Year</p>  <p>College, Sophomore Year</p> 	<p><b>Decision-Making</b></p> <p><b>Lesson 1</b> Get It for Less.....8</p> <p><b>Activity Sheet 1</b> But I Really Want It!.....10</p> <p><b>Game Sheet 1</b> Plan Your Party.....11</p> <p><b>Lesson 2</b> A Penny Saved.....13</p> <p><b>Activity Sheet 2</b> How Interesting!.....15</p> <p><b>Lesson 3</b> But I Love That New Car Smell.....16</p> <p><b>Game Sheet 2</b> Is It Covered?.....18</p> <p><b>Assessment</b> Show What You Know.....19</p>
<p>College, Senior Year</p> 	<p><b>Goal Setting</b></p> <p><b>Lesson 2</b> Get the Big Picture.....20</p> <p><b>Activity Sheet 2</b> Start With a Goal.....22</p> <p><b>Assessment</b> Show What You Know.....23</p>
<p>Graduate School</p> 	<p><b>Money and Inflation</b></p> <p><b>Lesson 1</b> A Place of My Own.....24</p> <p><b>Activity Sheet 1</b> When Prices Rise.....26</p> <p><b>Activity Sheet 2</b> Higher Education Cost.....27</p> <p><b>Assessment</b> Show What You Know.....29</p>
<p>Early Twenties</p> 	<p><b>Asset Allocation</b></p> <p><b>Lesson 1</b> Taking a Sensible Risk.....31</p> <p><b>Activity Sheet 1</b> Can You Handle the Risk?.....33</p> <p><b>Lesson 2</b> Finding the Right Mix.....34</p> <p><b>Game Sheet 1</b> \$10,000 Investment Game.....36</p> <p><b>Assessment</b> Show What You Know.....38</p>
<p>Mid Twenties</p>  <p>Late Thirties</p> 	<p><b>Diversification</b></p> <p><b>Lesson 1</b> Investment Choices, Part A.....39</p> <p><b>Lesson 2</b> Investment Choices, Part B.....40</p> <p><b>Activity Sheet 1</b> Spread It Around!.....42</p> <p><b>Activity Sheet 2</b> Can This Portfolio Be Saved?.....44</p> <p><b>Assessment</b> Show What You Know.....47</p> <p><b>Final Assessment</b> Show What You Know.....49</p> <p><b>Conclusion</b> .....51</p> <p><b>Glossary</b> .....52</p>

# Welcome

## Hello

Welcome to Money Confident Kids®, a financial education program that helps kids understand that every financial decision is associated with a **time horizon**. We follow Nikki from the seventh grade to her college graduation and beyond. Along the way, you'll get to know Nikki and her family and share her journey as she sets important **financial goals** along her time horizon and works to achieve them.

Nikki's story is told through real-life financial situations that range from deciding whether she should buy expensive running shoes to deciding if attending graduate school is a good career

**investment**. You'll see how Nikki uses what she's learned about money to create realistic goals and achieve them by creating a **budget**.

In addition, you'll have a chance to set your own goals and create a workable strategy to achieve them.

Making smart, informed decisions about money is a valuable skill that will help you throughout your life. The sooner you get Money Confident, the more opportunities you'll have to save for the things that are really important to you.



GOAL

## OVERVIEW

Learning how to save and invest your money and the importance of spending it wisely are essential life skills. Start your financial adventure today.

# Introduction

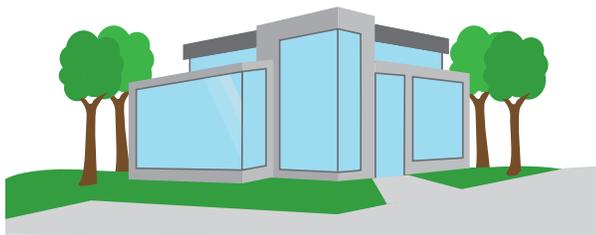
## Meet Nikki!

Hi! I'm Nikki, and I'm in seventh grade. I run track, play the viola, and am president of the coding club at school. I live with my mom, my dad, my sister—who's in college—and my brother—who's finishing high school. We have a very busy house, and I love every minute of it!

My mom is a preschool teacher, and my dad is a nurse. Together, they take care of our **needs**. Dad says that careful **financial planning** is the key.



And guess what? My grandparents live down the street. They're retired, so we get to spend lots of time with them. My grandfather knows I love to geek out on electronics, so he lets me tinker with all the cool equipment in his workshop whenever I want.



My **career** goal is to run a large software company. Mom says I'd better start practicing for the future by making smart money choices now. I get an **allowance** and make money babysitting, but after paying for new viola strings, running shoes, and snacks, I never seem to have any money left. I definitely need to figure things out!

## THE STORY

Learn how to manage money by reading about a girl who goes from typical teen to financial whiz by working hard and making smart money decisions. Follow Nikki and her family as she learns how financial education is key to planning and achieving her long-term goals.



**Middle School,  
Seventh Grade**



**High School  
Junior**

## Sorting Out Nikki's Goals

Nikki would feel better about money if she understood that each financial goal has a different **time horizon** (the length of time between now and when she'll achieve the goal).



### SHORT-TERM TIME HORIZON

Buying new running shoes might be *weeks or months* in the future. Nikki has time to find the best buy and save for the purchase.



**SNEAKERS**



**VIDEO GAME**



**LAPTOP**



### MEDIUM-TERM TIME HORIZON

College is expensive, and Nikki has to help pay for it. She'll go to college in *five years*, so the time horizon for that goal is medium. Even though it's years away, Nikki knows she needs to start planning now.



**COLLEGE**



### LONG-TERM TIME HORIZON

Nikki has other goals that have an even longer time horizon—*decades*! She **wants** to buy a house, have a career, travel, and retire after her career is over.



**BUY A HOUSE**



**RETIREMENT**



#### WHAT'S THE Big Idea?

Some financial goals have an immediate time horizon, while others happen over months, years, and even decades.

# Goal Setting



## LESSON 1

**Goal Setting** helps kids envision why they are saving and what they are saving for—and creating goals is the essential first step toward money confidence.



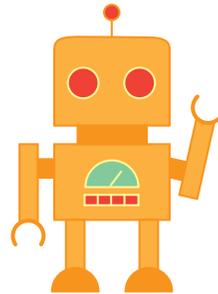
Middle School,  
Seventh Grade



High School  
Junior

## Better Get a Budget

I'm so excited! The science fair is in 10 weeks, and I've decided to design, build, and program a robot that can build other robots! How cool is that? I'll get the gold medal for sure! I shopped around, and the parts will cost me \$140.



I went over to Grandpa's house to have him check out my design and give me advice on raising the money I need. But he didn't want to talk about money first. He wanted to start with my goal. He said that people and businesses often use a process called **SMART goals** to make decisions. Goals need to be **S**pecific, **M**easurable (meaning there's a way to tell if you succeeded or failed), **A**chievable (meaning doable), **R**elevant (meaning appropriate or fitting for your current lifestyle), and **T**ime-specific (meaning there's a deadline).

### Specific

Your goal is clearly defined and states exactly what you are going to achieve.

### Measurable

Track your progress and know when your goal is met.

### Achievable

Your goal challenges you but is also something realistic.

### Relevant

Your goal is connected to what is valuable and important to you.

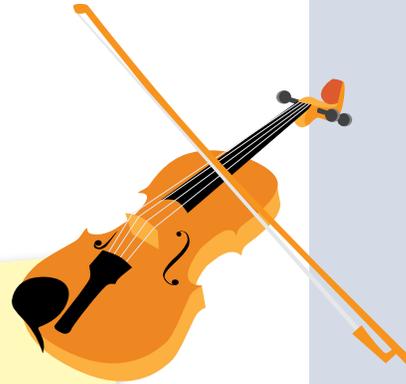
### Time-specific

Your goal includes a date you will have achieved it by.

To check the “Achievable” part of the SMART goals test, Grandpa helped me figure out whether I could pay for the parts I’d need for my robot. Here’s a list of my weekly **income**, **expenses**, and **savings**:

- My allowance is \$7 each week.
- I babysit little Maggie Moore one hour a week and get paid \$10.
- I buy a \$1 bag of potato chips every day at school.
- I spend \$8 per week playing video games.
- I give \$4 to Mom to pay her back for my new viola strings.

Grandpa and I added up my weekly income and expenses:



NIKKI'S INCOME & EXPENSES			
INCOME		EXPENSES	
Allowance	\$ 7	Snacks	\$ 5
Babysitting	\$10	Video Games	\$ 8
	\$17	Viola String Fund	\$ 4
			\$17
Income (\$17) - Expenses (\$17) = Nothing left for the science fair!			



Grandpa said I could save up the money I need by increasing my income and cutting my expenses. Then I should write down my new plan—my *budget*—to make sure I stick to it.



### WHAT'S THE Big Idea?

Income - Expenses = Savings.  
 Preparing and following a budget can help you increase your income, reduce your expenses, and end up with more savings.

Name \_\_\_\_\_



**GOAL SETTING  
ACTIVITY SHEET 1**

# It's in the Budget!

Nikki needs \$140 in the next 10 weeks for her awesome robot project. Right now, she spends all the money she earns and doesn't save anything. Here is a chart of her current weekly income and expenses:

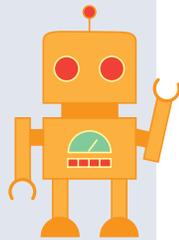
**Income – Expenses = Savings    \$ 0**

**Income**

Allowance	\$7
Babysitting	\$10
<b>Total Income</b>	<b>\$17</b>

**Expenses**

Snacks	\$5
Video games	\$8
Viola strings loan	\$4
<b>Total Expenses</b>	<b>\$17</b>



## Nikki has two money-making opportunities:

- Mrs. Moore has asked Nikki to babysit an additional two hours per week at **\$10 per hour**.
- Nikki's dad has offered her **\$30** to clean out the basement.

1. Make suggestions for Nikki to increase her income and lower her expenses:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. Prepare a new weekly budget for Nikki that includes your suggestions:

Income		Expenses	
_____	\$	_____	\$
_____	\$	_____	\$
_____	\$	_____	\$
_____	\$	_____	\$
<b>Total Income</b>	\$	<b>Total Expenses</b>	\$

**Total Income – Total Expenses = \$ Savings**

\$ \_\_\_\_\_ - \$ \_\_\_\_\_ = \$ \_\_\_\_\_

3. If Nikki follows your suggestions, how many weeks will it take her to save \$140?

\_\_\_\_\_

Answer Key: (1) Reducing or eliminating snacks and video games to lower expenses; working for her dad and for Mrs. Moore to increase her income. (2) Answers will vary, but income minus expenses should equal a positive number for savings. (3) Answers will vary, but \$140 divided by weekly savings will equal the number of weeks.

# Notice

## Note to Reader

You have just completed *Goal Setting Lesson 1* and learned about Nikki in middle school and the short-term goals she was able to achieve.

### OPTION 1

To keep a consistent flow with Nikki's time horizon and the financial decisions she could face as she moves into high school and her early college years, you can skip to the next module—*Decision-Making*—that lays the foundation for her long-term goals.

Afterward, come back here to *Goal Setting Lesson 2* and learn how Nikki is planning for her long-term goals as she finishes up college and looking ahead to the future.

### OPTION 2

Continue with *Goal Setting Lesson 2* below and jump ahead in Nikki's time horizon to learn how she is planning for her long-term goals as she finishes up college and looks ahead to the future.

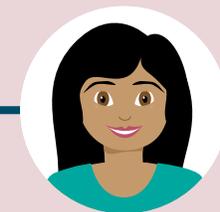


# Decision-Making



## LESSON 1

**Decision-Making**  
To get the most value for your money, think through your spending decisions carefully and resist buying on impulse.



High School Junior



College, Sophomore year

## Get It for Less

Hi guys! It's Nikki! Can you believe I'm a junior in high school already? This year, I'm volunteering at a Community Center. I'm teaching the residents how to make digital photo albums and use social media. My classes would be so much better if I could teach on a new laptop. I found one for \$499 at my local electronics store, but I only have \$425 in my **savings account**—and I also want to buy some video games. So I went to my sister, April, for help.

The first thing April made me do was define my goal. That's easy: I want to buy a new laptop. Then she told me that the fun part is figuring out what decisions to make to reach my goal. April always says purchases are either "*needs*" or "*wants*."

### NEEDS

**Needs** are the things you must have to survive, like food, water, and medicine—or *things that will help you achieve your financial goals*.



FOOD



WATER



MEDICINE

### WANTS

**Wants** are the things you would like to have but don't *really* need that can take you off track from reaching your goals, like a cool pair of jeans or a new phone cover.



JEANS



NEW PHONE COVER

But needs and wants can be tricky. Sometimes, it isn't so easy to tell the difference. For example: A grown-up could *need* a car to drive to work but might *want* that car to be a super-expensive SUV.

So the first step is to decide if my goal is a need or a want. If it's a want, then there's no rush. I can wait until I have enough money to buy wants or choose not to buy them at all. April thinks the laptop is more of a need because having better technology would help me develop my career. Video games are a want. Playing them is fun, but I don't need them to reach my goals. I decided to skip the video games and save my money for the laptop. April pointed out another important choice I could make: *comparison shopping*, since stores and websites often sell the same product for different prices and sometimes have sales.



She was right! I found out the laptop was \$499 at the local store, but \$450 at another one, which also offered a 10% discount for students. Guess where I bought my laptop?



### WHAT'S THE Big Idea?

To reach your financial goals, you have to make good decisions along the way. You can save money by holding off on buying things you don't need and by comparison shopping to get the best deal on the things you do buy.

Name \_\_\_\_\_



DECISION MAKING  
ACTIVITY SHEET 1

# But I Really Want It!

## Want or Need?

Nikki's big brother, Marcus, is going to culinary school, and his dream is to own a bakery someday. Not surprisingly, he loves any kind of sweet treat! He is also a big country music fan. Marcus wants Nikki to go shopping with him for things he thinks he needs next semester.

1. Look at Marcus's shopping list. Are these *wants* or *needs*?



Cookbook and supplies

Want or need? \_\_\_\_\_

Explain your thinking:

\_\_\_\_\_  
\_\_\_\_\_



Cowboy boots

Want or need? \_\_\_\_\_

Explain your thinking:

\_\_\_\_\_  
\_\_\_\_\_



Gourmet chocolate chip cookies

Want or need? \_\_\_\_\_

Explain your thinking:

\_\_\_\_\_  
\_\_\_\_\_

2. Marcus couldn't find the textbook in town, but he and Nikki found several options online:



Bookstore A

New, plus shipping  
\$97



Bookstore B

New, free shipping  
\$90



Bookstore C

Used, \$10 shipping fee  
\$47

Which book should Marcus buy? \_\_\_\_\_

Explain your thinking:

\_\_\_\_\_  
\_\_\_\_\_

Answer Key: (1a) A need, because Marcus must have the book for his baking class; his culinary education is an investment in his future career. (1b) While shoes can be a need, fancy cowboy boots are definitely a want. (1c) Food can be a need, but a gourmet snack is a want. (2) Bookstore C. The used book is the cheapest, even after shipping costs are included.

Name \_\_\_\_\_



**DECISION MAKING GAME SHEET 1**

# Plan Your Party

## Planning a Budget

Nikki's parents are celebrating their 30th wedding anniversary next month. Nikki, April, and Marcus decide to throw a surprise party for them. The guest list includes nine people: Nikki's parents, the three kids, and both sets of grandparents.

The kids have to apply good decision-making techniques to make sure they meet their goal: planning the best possible party that fits their budget!

Nikki suggests that each sibling contribute \$25. She thinks that will be enough to buy food and drinks for everyone. Marcus grumbles a bit because he thinks a party is more of a want than a need. But April reminds him that it's important to celebrate family events—and that he needs to contribute his \$25!



Nikki researches prices for different foods they could serve at the party and other fun items. Here are her options:



### PARTY ITEM OPTIONS

Item	Store A	Store B	Store C
Fruit Juice (serves 4)	Two for \$7.00	\$3.89	\$4.19
Bottled Water (1 serving)	\$0.39	Three for \$1.00	\$0.49
Water From the Tap (free!)	\$0	\$0	\$0
Pizza (serves 3)	\$7.99	\$8.99	Two for \$15.00
Turkey Burgers (pack of 10)	\$6.99	\$7.99	\$6.99
Party-Sized Subs (serves 10)	\$16.00	\$18.00	\$17.00
Cake (serves 10)	\$22.00	\$20.00	\$19.00
Ice Cream (serves 4)	\$5.99	Two for \$10.00	\$4.99
Giant-Sized Wedding Picture	\$17.50	\$20.00	\$22.50
Flowers	\$20.00	\$22.00	\$25.00
Greeting Card	\$5.95	\$5.95	\$6.95
Piano Player (\$50 fee)	N/A	N/A	N/A
Magician (\$40 fee)	N/A	N/A	N/A



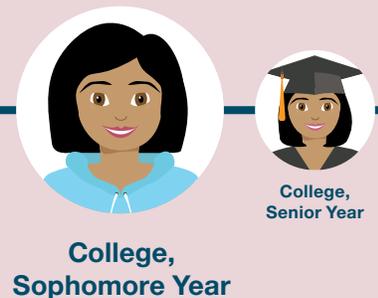


# Decision-Making



## LESSON 2

**Decision-Making**  
An important step in making wise financial decisions is understanding the relationship between spending practices and achieving financial goals.



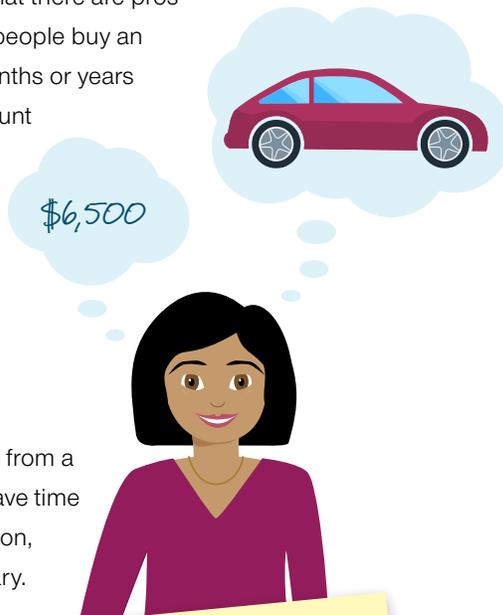
## A Penny Saved...

Wow, time flies! I'm at Grace Hopper State University and already in my second year of a software engineering program on a partial academic scholarship. I also have a part-time job at Batt Software. I'm making \$14,000 a year. I use that money to help pay college costs and living expenses, plus I save part of every paycheck. I just checked my savings account, and I have a whopping \$6,500!

I need to buy a car soon, a purchase with a **short-term time horizon**, so I can commute to work, but I also want to make sure I still have some savings for other goals.

While I'm shopping around for the best deal, I wonder if I'll have to take out a car loan. With a **loan**, I'd make a cash payment for part of the cost (called a **down payment**), then pay the rest, a bit each month, over several years. I learned that there are pros and cons to taking out a car loan. A loan helps people buy an expensive item immediately rather than wait months or years while they save for it. But, in addition to the amount of your purchase, a loan adds **interest** charges each month—a charge for borrowing the money. Over a four- or five-year loan, interest charges can add hundreds or thousands of dollars to the cost. For example, if I borrowed \$10,000 for five years at 7% interest, my total payments would add up to \$11,186.

Deciding to use a **credit card** or take out a loan from a bank is an important financial decision. If you have time to save for your goal, that is usually the best option, but sometimes, purchasing on credit is necessary.

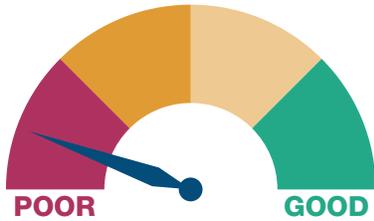


**LOAN PROS & CONS**

<u>PRO</u>	<u>CON</u>
- Buy expensive items immediately	- Adds interest charges; the item costs more in the long run

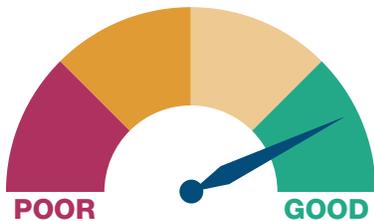
Mom said that I also need to establish a good **credit rating**. A credit rating is a number based on your history of paying back loans. If I make my payments on time, I'll get a higher credit rating and it will be easier for me to get a loan when I want to borrow again, like to buy a house or go to graduate school. If I mess up by not making my payments on time, I'll end up with a bad credit rating and it will be harder for me to borrow money in the future (and I might even have to pay a higher interest rate).

### POOR CREDIT RATING



- Miss payments
- Hard to borrow money
- Higher interest rate

### GOOD CREDIT RATING



- Make all your payments
- Easier to borrow money
- Lower interest rate



#### WHAT'S THE Big Idea?

If you need to take out a loan to help you pay for expensive things, you have to consider interest costs. You must make payments on time to keep a good credit rating.

Name \_\_\_\_\_



## DECISION MAKING ACTIVITY SHEET 2

MONEY  
CONFIDENTKids®  
Presented by T.RowePrice®



# How Interesting!

Do you really know how much you'll pay for an item you purchase on credit? The cost can vary depending on what type of credit you used and how you pay it back! You pay interest to a credit card company when you charge purchases on a credit card or to a bank when you borrow money via a loan.



Interest payments on credit card purchases or bank loans will most often be calculated as an annual percentage of the original amount loaned—for instance, paying 12% interest on \$100 on a credit card. To find out the dollar amount of the interest you'd owe after one year, multiply the original amount of money (\$100) by the interest rate (in this case, 12%, which is 0.12 when converted to a decimal for easier multiplying).

$$\$100 \times 0.12 = \$12.00 \quad \text{After the interest payment, you would owe } \$112.00$$

**Directions:** Calculate the amount of annual interest:

1. **\$200** on a credit card that charges **12%** interest \_\_\_\_\_
2. A **\$500** loan that charges **3%** \_\_\_\_\_
3. A **\$1,200** loan that charges **7.5%** \_\_\_\_\_
4. A **\$7,500** loan that charges **6.8%** \_\_\_\_\_

**Now Try This:** A borrower paid **\$66** on a **\$600** loan.  
What was the interest rate? \_\_\_\_\_

Answer Key: (1) \$24. (2) \$15. (3) \$90. (4) \$510. Now Try This: 11% (\$66 ÷ \$600 = 0.11 or 11%).

# Decision-Making



## LESSON 3

**Decision-Making**  
Staying on track to reach financial goals involves making trade-off decisions for spending on things we don't really need. Understanding how to make smart spending, saving, and investing decisions now helps set you up for a more secure financial future.



College,  
Sophomore Year



College,  
Senior Year

## But I Love That New Car Smell

Time to go car shopping! I started by researching different types of cars online, both new and used, to narrow down the models that I'm interested in. Then I headed over to a few local dealerships to look at cars in person, and I fell in love with a bright-red sports car. It's a two-seater, really fast, and super cute! I want that car!



The dealer was selling a new model for \$21,000 and offering a five-year loan at 5%. Using an online calculator, I figured that if I made a \$4,000 down payment, all I would have to do is make 60 monthly payments of \$320.81. I know the interest rate is high, but I really want that car.

When I told my parents about it, they pointed out that even though I want that car, I definitely need something more practical. Dad helped me do the math to figure out the cost of my dream car: I would pay more than \$2,200 in interest over the five-year life of the loan, and I would use up most of my savings for the down payment. And there are those other expenses I hadn't even considered: gas, maintenance, auto **insurance**, and unexpected costs for repairs. Mom explained that insurance can cost hundreds of dollars a month—and that I absolutely need it to protect myself from the financial **risk** of expensive repairs and lawsuits if I ever have an accident.



### WHAT'S THE Big Idea?

If we keep our focus on what we really need rather than what we want when we buy things, we'll have more money in the long run and a more secure financial future.

## Nikki's Car Purchase Analysis



New

Car Fund (Savings): \$6,500  
 Less Down Payment: \$4,000  
 Remaining Savings: \$2,500

Car Price–New	\$21,000
Down Payment	\$4,000
Amount of Loan	\$17,000
Loan Period	60 months (5 years)
Interest Rate	5%
Monthly Payment	\$321

Actual Total Cost of Car = \$23,000!  
 (\$21,000 + \$2,000 interest)



Used

Car Fund (Savings): \$6,500  
 Less Cash Purchase: \$4,950  
 Remaining Savings: \$1,550

Car Price–Used	\$4,950
Pay Cash	\$4,950
Amount of Loan	\$0
Loan Period	None
Interest Rate	0%
Monthly Payment	\$0

Actual Total Cost of Car = \$4,950

**Remember** that recurring costs (gas, maintenance, insurance) and unexpected costs (repairs) will add expenses to your monthly budget.



Thanks, Mom and Dad, you've convinced me to spend wisely! I went back to the dealer and test-drove a safe used sedan that cost \$4,950, an amount I could pay from my savings. I had Grandpa check out the mechanics, and he approved. Sold!

Name \_\_\_\_\_



**DECISION MAKING  
GAME SHEET 2**

# Is It Covered?

Car **insurance** is required by law in all but two states. But would it be a good idea to buy it even if you didn't have to? Simulate 7 years of insurance payments and driving experience and see what happens!

Each year, you will pay the \$2,000 cost of a car insurance policy (already printed on your game sheet). In real life, insurance costs increase over time, but so do the costs of accidents and lawsuits.



**Directions:** For each year, roll two dice, add the numbers together, and look at the chart to see what your cost of accidents and lawsuits would have been without insurance. Record that amount on the Dice Roll Chart. After seven years, compare the cost of auto insurance to the cost of not having auto insurance.

Dice Total	Result	Year Number	Auto Insurance Cost	Cost of Accidents and Lawsuits
2	Lose a \$2,000,000 lawsuit	1	\$2,000	
3	Pay for a \$4,500 repair	2	\$2,000	
4	Pay a \$5,500 medical bill	3	\$2,000	
5-6-7-8-9	No accidents or lawsuits	4	\$2,000	
10	Pay for a \$6,000 repair	5	\$2,000	
11	Pay for a \$7,500 repair	6	\$2,000	
12	Pay \$60,000 in hospital costs to accident victim	7	\$2,000	
		<b>TOTAL</b>	\$14,000	\$

Name \_\_\_\_\_



**DECISION-MAKING ASSESSMENT**

# Show What You Know

We all have limited time and money, and resisting impulse buys is a key **financial strategy**. “Saving” is really just planning to “spend later.” It’s all spending, but the difference is whether you’re planning to spend now or spend later: *Do you really need to buy something now or can it wait?*

Here’s a quick quiz that reviews some of the important points we’ve covered. See how much you’ve learned about money and managing your finances.



1. What are three things a person can do to reduce their expenses?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. Expenses can be classified as “needs” or “wants.” Decide whether you think the following items are needs or wants. Please explain your thinking. For an extra challenge, identify a situation in which each expense below is a need AND a situation when it’s a want.

a.) A visit to Nikki’s eye doctor for new glasses.

*Want or need?* \_\_\_\_\_  
Explain your thinking: \_\_\_\_\_



c.) Expensive running shoes to help Nikki exercise.

*Want or need?* \_\_\_\_\_  
Explain your thinking: \_\_\_\_\_

b.) Movie tickets for Nikki and a friend.

*Want or need?* \_\_\_\_\_  
Explain your thinking: \_\_\_\_\_



d.) A graphing calculator for Nikki’s finance class.

*Want or need?* \_\_\_\_\_  
Explain your thinking: \_\_\_\_\_

3. Fill in the blanks with words from the word bank to make the statement true:

**WORD BANK** Interest Expenses Savings Income \_\_\_\_\_ - \_\_\_\_\_ = \_\_\_\_\_

Answer key: (1) Compare prices from different sellers; consider reducing, eliminating, or deferring expenses that are considered wants; consider buying a used item if it will suit your purpose. (2a) need; (2b) want; (2c) need; (2d) probably a need, but “fancy” school supplies could be considered a want. (3) Income – Expenses = Savings.

# Goal Setting



## LESSON 2

**Goal Setting** helps you envision why and what you are saving for and when you want to achieve it. Knowing how long you need to save for your financial goal is called a “time horizon.”



College,  
Senior Year



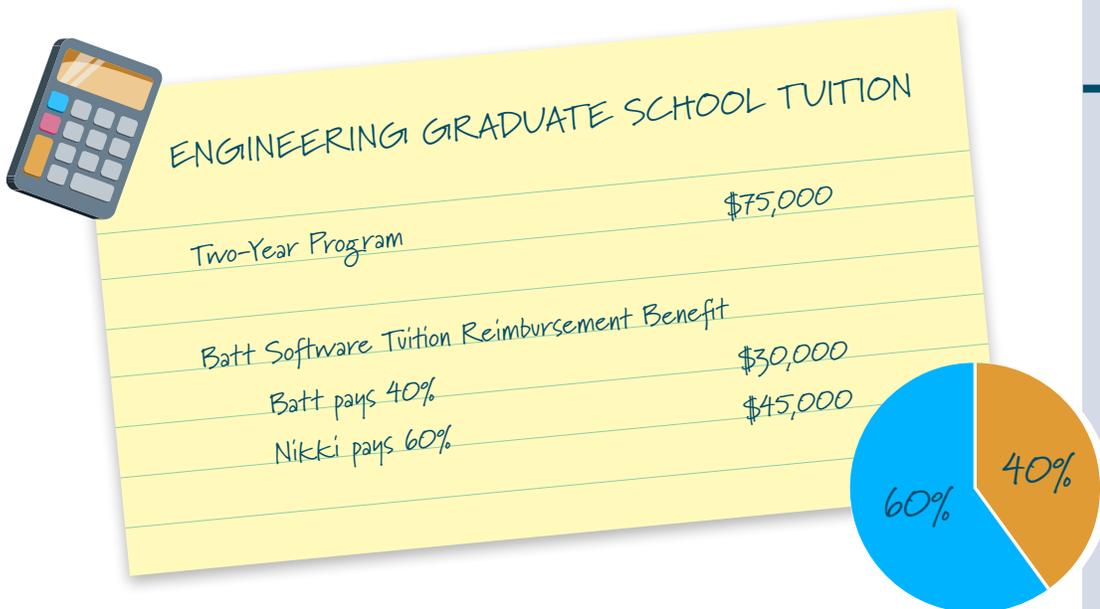
Graduate  
School

## Get the Big Picture

I just started my senior year in college! The manager of my part-time job at Batt Software has offered me a full-time position after graduation with an annual **salary** of \$80,000. But she also advised me to go to graduate school for a master’s degree in software engineering. She said that at Batt, engineers with **graduate degrees** typically make \$20,000 more each year.



Total tuition for the two-year program is \$75,000—yikes! Batt Software employees have a tuition reimbursement benefit that covers 40% of tuition costs. I would have to pay 60% of the total tuition cost. That’s \$45,000 (\$75,000 – 40% of \$75,000)! I would definitely need to take out student loans.



To help me think this through, I called my sister, April, to discuss my options.

We figured out that I basically have three choices:

### CHOICE 1



#### WORK

Work for Batt right away and skip graduate school. I would make \$80,000 a year and save \$45,000 in tuition costs. But that might mean giving up a higher salary in the future.

### CHOICE 2



#### SCHOOL

Go to school full-time, then work for Batt after I get my master's degree. I would finish the degree more quickly and not have to work and go to school at the same time. But I would be giving up two years of salary, and Batt wouldn't pay for any of my tuition.

### CHOICE 3



#### WORK & SCHOOL

Work full-time for Batt and go to school part time. I would have to borrow \$45,000, but Mom said it would be a good *investment* in my future. The money I put toward school now will lead to financial gains later. If my salary goes up by \$20,000 when I finish, I'll be able to pay off the loan in a little over two years.

**My decision:** I'm going to work full time for Batt Software and go to school part time. I'll be very busy, but my plan gives me the possibility of a higher salary with the least amount of **debt**. Wish me luck!



#### WHAT'S THE Big Idea?

Investing in yourself by furthering your education might seem difficult, but it can pay off in the future. Be realistic about whether paying back a school loan will be doable based on the salary you are likely to earn after you graduate.

Name \_\_\_\_\_



GOAL SETTING  
ACTIVITY SHEET 2

# Start With a Goal

## Time Horizons

Financial goals have different time horizons. Here are a few examples:

- Something you need immediately or within a couple years has a **short-term time horizon**.



- Something you save for over several years, such as a car, has a **medium-term time horizon**.



- Something you save for that will happen many years or decades in the future, like retirement, has a **long-term horizon**.



Because Nikki is a few months away from college graduation, she sat down and listed her goals. Determine whether each goal has a short-, medium-, or long-term time horizon.

1. Replacing her college car with a newer model.



Time horizon \_\_\_\_\_

Explain your thinking:

---

---

---

2. Buying work clothes for her new job.



Time horizon \_\_\_\_\_

Explain your thinking:

---

---

---

3. Deciding on whether to make a donation to her local library.



Time horizon \_\_\_\_\_

Explain your thinking:

---

---

---

4. Retiring using her company's **retirement** savings program.



Time horizon \_\_\_\_\_

Explain your thinking:

---

---

---

Answer Key: (1) Medium term, 5-10 years. (2) Short term, 1-4 years or less. (3) Short term, 1-4 years or less. (4) Long term, 11-30+ years. To retire comfortably, you should begin saving as soon as possible to give your money time to grow.

Name \_\_\_\_\_



### GOAL SETTING ASSESSMENT



# Show What You Know

You've learned about the importance of setting financial goals that are specific, measurable, and have a definite deadline.

**S**pecific  
**M**easurable  
**A**chievable  
**R**elevant  
**T**ime-specific

Visualizing your goal is one way to stay focused on what you want to achieve. In the space below, create a poster, comic, or drawing of one or more of your long-term financial goals.

**Reflect:** How will your visual reminder help you achieve your goal? What is your intended deadline for each of those steps?

---

---

---

---

# Money & Inflation



## LESSON 1

Inflation is the increase in the price of goods and services over time, which means that long-term financial goals will likely cost more than they do today.



Graduate  
School



Early  
Twenties

## A Place of My Own

Hi, it's Nikki! I can't believe that I'm about to finish graduate school. I'm so proud of my hard work *and* my new job title: Senior Programmer of Robotic Applications! Thanks to my good salary—and the fact that I've been able to save money by living with my parents—I've paid off most of my student loans. Hurray!



I've also got new goals. As much as I love my family, I think it's time I lived on my own. I am a grown-up after all! When I said I wanted to buy a house or a condominium with my savings, Grandma explained that almost no one can afford to buy a home that way. She told me I'd have to make a cash **down payment** (usually equal to 20% of the cost of the home) and then borrow the rest from a bank.



MORTGAGE

This loan is called a **mortgage**, and most people pay it off over 30 years. That's a long-term commitment!

There's one house I absolutely adore (it's got a huge backyard!) that costs \$150,000. A down payment, or 20% of this price, would be \$30,000. I have about \$6,000 in savings now, so I'd have to save \$24,000 more before I could purchase it.



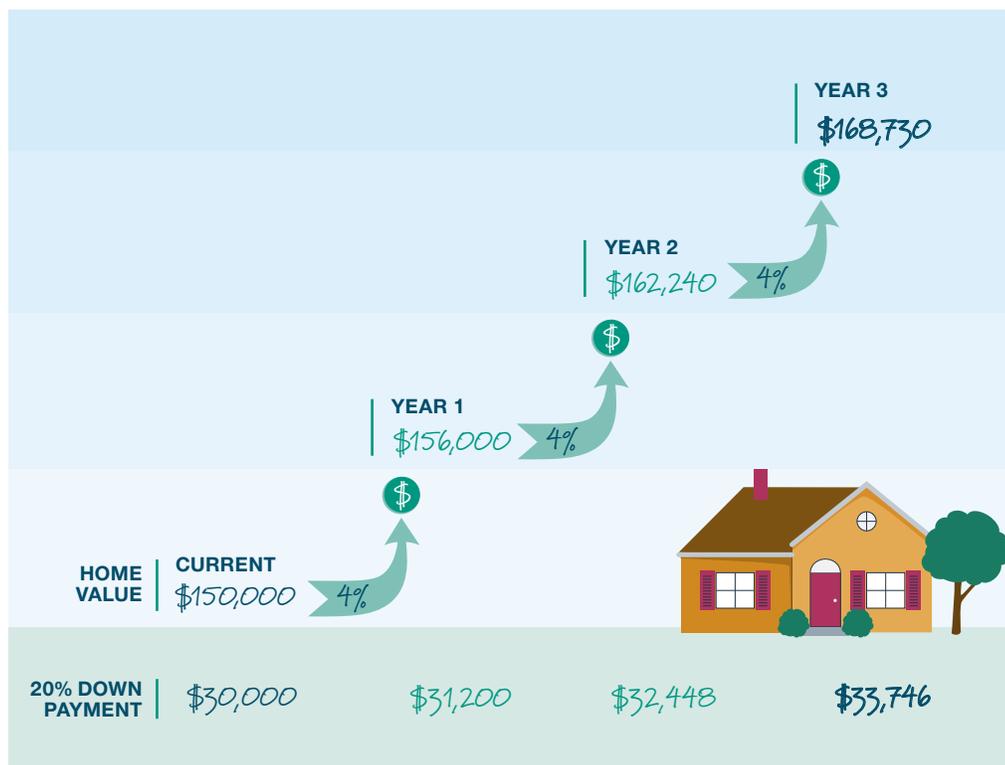
### SHORT-TERM TIME HORIZON



SAVING FOR HOUSE  
DOWN PAYMENT

I figure my time horizon to save for the down payment will only take me three years!

But then, Grandma kind of bummed me out when she told me about **inflation**, which is the increase in prices over time. She explained that three years from now, my dream house will likely have gone up in value—which means my down payment would also rise. So, if the price of my \$150,000 home increases 4% per year, it will cost almost \$169,000 in three years. At that point a 20% down payment will be \$33,800, not \$30,000! I'll have to save even more than I thought. I'm glad I'm learning this now!



**To calculate the effects of inflation over several years:**

1. First, **add 100%** to the percentage increase. (So, for a 2% inflation rate, use 1.02%.)
2. Then **convert the percentage** to a decimal (2% is equivalent to .02.)
3. Finally, **multiply the decimal** times the current cost.
4. For inflation over more than one year, **multiply the calculation for year 1** by the decimal. Repeat this operation—multiplying the result by the decimal once for each year.

**Example:** A \$200 item has a projected 2% inflation rate. After three years, the cost will be \$212.24 (rounded to the nearest cent). Year 1:  $\$200 \times 1.02 = \$204$ ; Year 2:  $\$204 \times 1.02 = \$208.08$ ; Year 3:  $\$208.08 \times 1.02 = \$212.24$ .



**WHAT'S THE Big Idea?**

When you're planning for a financial goal with a long-term time horizon, you need to consider and plan for the effects of inflation.

Name \_\_\_\_\_



**MONEY AND INFLATION  
ACTIVITY SHEET 1**



# When Prices Rise

Nikki is still dreaming about one of her biggest goals—owning her own home—but the reality of inflation is really putting a wrench in things! She wonders how she will plan for rising housing prices, along with all the other expenses that come with homeownership, like property taxes, utilities (gas, electric, water), and insurance. Plus, as Grandma reminded her, there are unexpected costs, like a roof repair. Although many mortgages have payments that stay the same for the life of the loan, all the other costs could increase due to inflation.



Nikki planned to spend a total of \$1,150 per month for housing. If she takes inflation into account, will \$1,150 be enough for all her housing costs? If not, how much will she need to budget?

**Hint:** Inflation is an economic force that reduces purchasing power, meaning that a dollar buys less than it used to. Inflation is expressed as a percentage increase. If the price of an item was \$100 on January 1, 2019, and \$110 on January 1, 2020, the annual inflation rate for that item was 10%.

Directions to calculate inflation are on page 25 (second page of Money & Inflation Lesson 1)



## NIKKI'S MONTHLY HOUSE BUDGET

Expense Type	Current Year Cost	Projected Annual Inflation Rate	Cost Three Years From Now
Mortgage	\$600	None	_____
Property tax	\$300	2%	_____
Gas	\$100	1%	_____
Electricity	\$50	2%	_____
Water	\$25	3%	_____
Insurance	\$50	5%	_____
<b>TOTAL</b>	<b>\$1,125</b>		

Answer key (third column): Mortgage, \$600; Property tax, \$318.36; Gas, \$103.03; Electricity, \$53.06; Water, \$27.32; Insurance, \$57.88; Total: \$1,159.65. Nikki's housing budget of \$1,150 is sufficient for the current year, but it will be less than her projected costs in the third year, when she will have to increase her housing budget to \$1,160 per month.

Name \_\_\_\_\_



MONEY AND INFLATION  
ACTIVITY SHEET 2

# Higher Education Cost

## The Higher Cost of Higher Education

One long-term expense that you (and your parents!) might face in the next four to six years is college tuition. Due to inflation, college gets more and more expensive every year. Today, the average tuition at a state college is \$10,400 per year for in-state students. If room and board is considered, the total cost is about \$22,000. Out-of-state and private colleges are even more expensive. And consider this inflation fact: The price of tuition has been increasing at a rate of about 6% per year!



**Directions:** Take a look at the chart below and compare the cost of college for Nikki's family members. Then predict on the next page what the cost of tuition might be when you're ready to head off to college.

COST OF TUITION INCREASE

Family Member	Year	Costs*	Average Annual Percentage Increase
Grandpa	1971	\$405	N/A
Grandma	1972	\$430	6.1%
Dad	1990	\$1,910	8.6%
Mom	1993	\$2,540	10.0%
April	2015	\$9,430	6.2%
Nikki	2019	\$10,440	0.5%



\*One-year public college tuition and fees

<https://finance.yahoo.com/news/average-cost-college-jumped-incredible-122000732.html>

Name \_\_\_\_\_



MONEY AND INFLATION  
ACTIVITY SHEET 2

# Higher Education Cost

## Consider Your College Costs

(Continued)

What will college cost when you're ready to go? Look ahead, and start planning today.



**Consider:** The average cost of college today for one year with room and board is \$22,000.

What do you think the cost will be in five years? \_\_\_\_\_

**Take It Further!** If your teacher asks, visit the website of a college you would like to attend to determine the current cost of tuition. What will tuition cost when you are ready for college?

I hope to attend (name of college) \_\_\_\_\_ in \_\_\_\_\_ (4, 5, or 6) years.

Today, annual tuition is \$ \_\_\_\_\_.

Taking inflation into account, tuition will be \$ \_\_\_\_\_ when I'm ready to attend.

**Reflect:** How does inflation affect your thinking as you plan to pay for future college costs? Do you have any strategies that might help you prepare for your medium-term time horizon?

---

---

---

---

---



Answer key: Research: Answers will vary. Check your answers here: [bit.ly/collocostcalc](http://bit.ly/collocostcalc). Reflect: Individual answers will vary, but you can deal with the increase in tuition costs by some combination of comparison shopping and increasing savings by cutting costs and increasing income. You may also have to consider student loans to cover tuition costs.

Name \_\_\_\_\_



**MONEY AND INFLATION  
ASSESSMENT**

# Show What You Know

You might know the price of something today, but because of inflation, it could change a lot in the future!

## PART 1

**Directions:** Here are the 1999 prices for five common items. Draw a line to match it with the price of the item in 2019. Notice the effect of inflation on the price and how the price of some items has increased more than others.

ITEM	1999 Price (20 Years Ago)	2019 Price (Price Today)
 Home	\$191,800.00	\$9.01
Chocolate bar (1.5-ounce)	\$.50	\$1.31
 New car	\$20,686.00	\$373,700.00
Milk (1 gallon)	\$2.88	\$37,185.00
 Movie ticket	\$5.06	\$3.28

Answer Key (2019 Price): Home, \$373,700; New car, \$37,185; Movie ticket, \$9.01; Chocolate bar, \$1.31; Milk, \$3.28.

Name \_\_\_\_\_

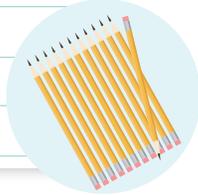


MONEY AND INFLATION  
ASSESSMENT

# Show What You Know

## PART 2

**Directions:** Calculate the annual percentage increase for the items below. (Remember: To find a percentage increase, subtract the original price from the new price and divide the difference by the original price. Don't forget to convert your answer to a percentage.)

ITEM	2020 Price (Price Today)	2019 Price (1 Year Ago)	Inflation Rate
 Winter coat	\$76.22	\$74.00	_____ %
Gasoline (1 gallon) 	\$2.73	\$2.60	_____ %
 Theme park admission	\$82.39	\$77.00	_____ %
Pencils (1 dozen) 	\$2.31	\$2.10	_____ %

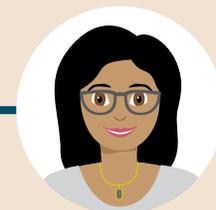
Answer key (rounded): Winter coat, 3%; Gasoline, 5%; Theme park admission, 7%; Pencils, 10%.

# Asset Allocation



## LESSON 1

**Asset Allocation** is how your money is divided among stocks, bonds, and cash according to your financial time horizon and is key to achieving long-term goals.



**Early  
Twenties**



**Mid-  
Twenties**

## Taking a Sensible Risk

Hi, folks! It's Nikki. It's been two years since I finished graduate school, received a promotion at work, and bought my house! It's within my budget, near my family, and perfect for one person! Five or 10 years down the road, I'll want my own family *and* a bigger house, so I'll have to plan for even more expenses! Especially when my longer-term goals are to start my own software company and fund a scholarship at my college!



At lunch yesterday, my company gave a talk on "Personal Financial Planning and **Asset Allocation**." They mentioned that there are three basic building blocks to develop an asset allocation strategy: cash, **bonds**, and **stocks**. Each investment type has a risk (the danger of losing money) but also a reward (the chance to make money).

### BUILDING BLOCKS FOR ASSET ALLOCATION

#### CASH



Cash is money kept in savings, checking, or other accounts at a financial institution like a bank. These accounts have a low reward because they pay little or no interest, but they are also low risk because bank accounts are insured by the federal government.

#### BONDS



Bonds are like a loan to a company and the company promises to pay the loan back plus interest. Because interest rates on bonds are higher than rates given by cash accounts, the reward is higher. But there is also a risk of losing money if the company goes out of business.

#### STOCKS



Stocks give you part ownership of a company. The value of your share in the company can go up or down depending on changes in the **stock market**. Over time, stocks have given the highest financial rewards, but there is the risk of losing some or all of your investment if the company does poorly or goes out of business or if the stock market declines.

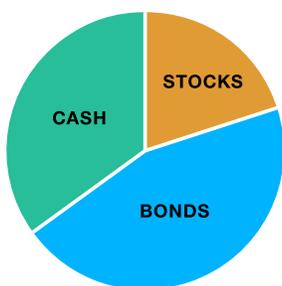
Good thing I was having dinner with Mom and Dad and learned even more about investing! Mom said that smart **asset allocation**—or having the right combination of cash, bonds, and stocks—is one key to successful investing. Her investment account has grown nicely over the years because her asset allocation strategy was to invest more in stocks. But, she said, strategies can shift depending on your **time horizon**. Since she's approaching retirement, she'll need



to rebalance her investments for less risk by increasing bonds and reducing stocks. I was confused about why she'd change her strategy if she was making money. She explained that *the closer you get to needing your money, the more you should reduce the risk of losing it*. Great advice!

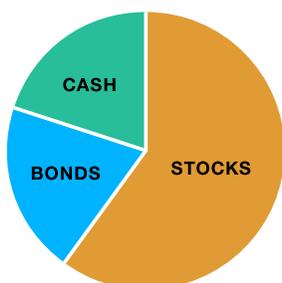
## ASSET ALLOCATION MIX

### SHORT-TERM TIME HORIZON



A financial goal with a short-term time horizon means that you'll need your money soon. Reduce risk by limiting the amount you have in stocks and investing more in cash and bond options, which are less risky.

### LONG-TERM TIME HORIZON



A financial goal with a long-term time horizon means that you won't need your money right away and can accept more risk by investing more in stocks (stocks have the potential to earn more money, but they can also lose more money too).

Mom said that an easy way to get started investing is to use **mutual funds**. Mutual funds are a collection of different stocks, bonds, and other investments. Since the mix of investments in mutual funds comes in different shapes and sizes, it meets the needs of different investment strategies. Some mutual funds have only bonds, some have only stocks, and some have a mix! I can't wait to get started!



### WHAT'S THE Big Idea?

Having an Asset Allocation strategy based on your time horizon helps you save for long-term financial goals by using three major building blocks: Cash, Bonds, and Stocks.

Name \_\_\_\_\_



**ASSET ALLOCATION  
ACTIVITY SHEET 1**

# Can You Handle the Risk?

All investments have risks. For example, if you own stock in a company that goes out of business, that stock will lose value and you'll lose money. On the other hand, if you buy stock in a company that really takes off, your stock will go up in value and you'll make money.

Many young people, like Nikki, are willing to deal with higher-risk investments because even if they lose money, they know they have many years to make up for the loss. Someone like Nikki's mom, who is closer to retirement, will typically reallocate to lower-risk investments, since she will need to withdraw her money soon.



**Directions:** Match the person with the appropriate investments.

<u>Person</u>	<u>Investments</u>	
1. Desmond, an 85-year-old retiree	a. 100% invested in a mutual fund investing in new high-tech companies	
2. Carmen, a 30-year-old attorney	b. Mutual funds with 80% stocks, 20% bonds	
3. Indira, a 55-year-old electrician who expects to retire in 10 years	c. Mutual funds with 50% stocks, 50% bonds	
	d. Mutual funds with 30% stocks, 70% bonds	

 **STOCKS**  
 **BONDS**

**Explain your thinking:**

Desmond:	Carmen:	Indira:
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Answer Key: (1) d. Desmond needs the income and relative safety that a higher percentage of bond funds gives him because he doesn't have income from a job anymore. He keeps a smaller percentage of stocks to guard against the effects of inflation. (2) b. Carmen can afford to accept the higher risks but higher potential reward of stocks because she has a high-paying job and has many years until retirement to weather the ups and downs of the stock market. (3) c. Even if the stock market declines over the next 10 years, Indira still has a good-size investment in bonds that will give her a secure income as she enters retirement.

# Asset Allocation

## Finding the Right Mix

Hi everyone—Nikki here! Even though I'm grown up now, I still ask my grandparents for advice, especially about *retirement*. It seems far away, but they say it's never too early to start saving! With my promotion, I'm able to put more money into my 401(k) retirement plan at work. I'm excited to invest for my future!



A **401(k) plan** is a special retirement account that lets you invest money you earn now, but you do not pay taxes on your earnings until you take the money out in the future.

I decided to ask my grandparents for advice. I went to their house with my paycheck information and the brochures from the company.

Grandma said that the key to a comfortable retirement is planning and saving early. She asked me two key retirement planning questions: (1) How long do you have to save for your goal (retirement)? and (2) How long do you need your money to last? She always asks tough questions! Well, I'm about 40 years away from retirement—which is a really long time horizon—and we figured that I'll need money to last me at least another 30+ years after I retire to cover me into my old age. So glad I'm starting early!



### TWO KEY RETIREMENT PLANNING QUESTIONS

1. How long do you have to save for your retirement goal?
2. How long do you need your money to last?



## LESSON 2

### Asset Allocation

Long-term goals may seem far away, but starting to save early is important and you'll need a mix of investments to achieve them.



Early  
Twenties



Mid-  
Twenties

We went through the brochures and my pay records. The funds for my 401(k) account would come out of my paycheck, and my company also puts money in. I make \$100,000 a year, so if I put 10% of my salary into a 401(k), I'd contribute \$10,000 and my company would contribute \$3,000.



**NIKKI'S 401(K) CONTRIBUTION**

Nikki's Annual Salary	\$100,000
401(k) Contribution per year	\$10,000
Nikki Contributes 10%	\$3,000
Company Contribution	<u>\$3,000</u>
TOTAL	\$13,000

Then we started to look at the mutual fund investment options offered by the investment company managing the plan. Some of the funds included stocks, some bonds, and some a mix of the two. As I get older, like mom, I'll rebalance my investments to include a greater percentage of bonds because they are less risky, and I won't have as much time to recover any losses. Great advice, Grandma and Grandpa!



### WHAT'S THE Big Idea?

Even though some of your financial goals seem a long way off, if you start investing early *and* consider your time horizon when choosing investments, you'll have a better chance of having enough money when you need it.

Name \_\_\_\_\_



**ASSET ALLOCATION  
GAME SHEET 1**

# \$10,000 Investment Game

## Play the \$10,000 Investment Game

**You have \$10,000 to invest.**

Review the Asset Allocation Models and the Investment Chart to the right.

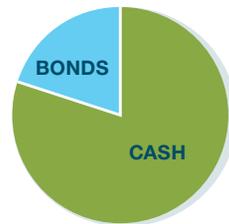
Then select investments from the Investment Chart that best represents each asset allocation mix.

On the next page, choose how you want to allocate the \$10,000 across the investments you selected (see example at top of next page).



(Continues on next page.)

### Asset Allocation Models



**Short-Term Time Horizon**  
80% Cash, 20% Bonds



**Medium-Term Time Horizon**  
50% Stocks, 50% Bonds



**Long-Term Time Horizon**  
90% Stocks, 10% Bonds

### Investment Chart



		Dice Roll Value						
Investment Type		2	3-4	5-6	7-8	9-10	11	12
Low ↑ Risk ↓ High	<b>CASH*</b>	+ 2%	+ 2%	+ 2%	+ 2%	+ 2%	+ 2%	+ 2%
	<b>BONDS</b>	+ 8%	+ 6%	+ 6%	+ 4%	+ 3%	0%	- 1%
	<b>STOCKS</b>	- 25%	- 11%	- 5%	+ 12%	+ 16%	+ 21%	+ 30%

\*Cash is a Bank Savings Account or Money Market Account.

Name \_\_\_\_\_



**ASSET ALLOCATION GAME SHEET 1**

# \$10,000 Investment Game

## Play the \$10,000 Investment Game

(Continued)

Select investments from the Investment Chart on the previous page that are appropriate for the time horizons in the chart to the right.

Roll the dice\* to see how your investments perform by matching the dice roll value with your investments.

Then calculate your gain or loss by multiplying your investment by the % increase or decrease found in the chart on the previous page.

**Extra Credit** Analyze the Investment Chart on the prior page. As the investment risk increases, what trends do you see in the performance percentages? How did this affect the Year-End Values of your investments for the different time horizons?

### Track Your Money

Time Horizon	Dice Roll	Investment Type	Risk	Amount	% Change	Gain (Loss)	Year-End Value
Short-term example	6	Cash	Low	\$8,000	+ 2%	\$160	\$8,160
	6	Bonds	Moderate	\$2,000	+ 6%	\$120	\$2,120
Short-Term							
Medium-Term							
Long-Term							



Answer Key: Answers will vary, but low and moderate risk investments should have more consistent returns. Higher risk investments have the potential for larger gains but also larger losses.

\* Use real dice or an online dice application.

Name \_\_\_\_\_



ASSET ALLOCATION ASSESSMENT

Having an asset allocation strategy that is in sync with your time horizon is key to achieving long-term goals.



# Show What You Know



1. If your child were heading off to college in a year, which is a short-term time horizon, would it be a good idea to invest the college fund 100% in stocks?  
\_\_\_\_\_
2. To reach long-term goals, why should a person invest in a mix of stocks and bonds and not just in a savings account?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. Why is it a good idea to review your asset allocation as you get older?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. Why would a younger person want to have a higher percentage of stocks in their **portfolio** than a person getting close to retirement age?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Answer Key: (1) No. Stocks go up and down. If the stock market had a major decline, the value of the fund might not be enough. For goals with a short-term time horizon, low-risk investments are best. (2) A savings account alone will not earn enough money to outpace the effects of inflation on purchasing power or enable one to reach long-term goals. Stocks offer the chance of higher returns but can also lose value. Bonds offer a steady flow of interest income but tend to have lower investment returns than stocks. (3) As people age and get closer to retirement, they usually want to increase their overall percentage of bonds. They should periodically check their allocation percentages to make sure they're close to their target. If, for example, stock values increase a lot, they might want to sell some stocks and buy more bonds. (4) With investments, risk means that there is a chance that the value of the investments will decline. As people approach retirement, there isn't as much time to recover from significant investment losses, and income from investments is an important source of income for retirees.

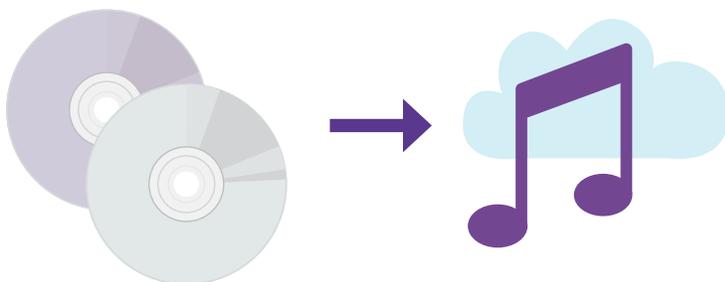
# Diversification

## Investment Choices, Part A

Hi! Nikki here! I'm 25 years old and already dreaming of the future: retiring to a beach house! I'm relieved that I have a **401(k) account** at work to help me save for the ultimate long-term goal—retirement. I've been learning more about the stock market, and I think I'm ready to do more investing. I went to Grandma and Grandpa's for breakfast this morning to talk it over.



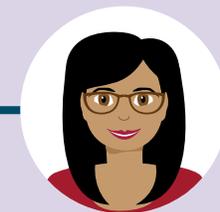
I asked if I should invest my money in Batt stock. After all, our sales have been growing, and the share price of my company's stock keeps increasing! But Grandpa pointed out that just because the company is doing well now, that may not be true in the future, so it would be a bad idea to invest *everything* in Batt. What if the company suddenly loses a lot of money? The stock would go down, and I would probably lose lots of money too! He gave me a great example to explain: There were once companies that had stores that sold compact discs (CDs). Their stocks were very popular. Unfortunately, music streaming services made CDs seem out of date, and investors in those companies lost a lot of money. Grandma chimed in to say that I'd be smart to *diversify* (buy a variety of stocks) so that if one stock's price drops, it won't seriously damage my finances. But how can I afford to buy a whole bunch of stocks? Grandma reminded me that I invest in mutual funds in my 401(k) plan. Because each fund owns many stocks, it gives me built-in **diversification**. It's kind of like buying a premixed salad!



### LESSON 1

#### Diversification

Ever heard the old saying “Don’t put all your eggs in one basket”? That’s the idea behind diversification, which is really just another way of saying you should be putting your money in different types of investments to help reduce risk.



Mid  
Twenties



Late  
Thirties



#### WHAT'S THE Big Idea?

Diversifying your investments by owning different types of companies can help reduce the risk of your investments losing value when economic or political events hurt a particular industry or company.

# Diversification

## Investment Choices, Part B

After doing more reading on diversification, I feel like I should talk to someone my age about where to start! Last night, I called my sister April for more advice. She's a doctor now, and although she's older than me, we have similar financial time horizons. Plus, she's really smart and has been investing for several years! She loves to talk about money matters.

April said that since I'm 25 and have many years to deal with the ups and downs of the stock market, it was okay to invest in stocks for my long-term goals.



- ENTERTAINMENT
- MANUFACTURING
- MEDICAL

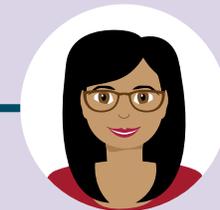
She wouldn't let me off the phone without reminding me of one more thing: If you use a mutual fund as part of your diversification strategy, make sure to research the mutual fund to understand the different types of stocks it holds. The last thing you want is to have most of your money invested in one type of company or industry. For example, if you only invest in companies that make candy and they lose a lot of money because bad weather wipes out the sugarcane crop, then you will likely lose a lot of money, too, when their stock plummets. However, if your investments are spread over different types of industries and companies, such as technology companies, health care companies, manufacturing companies, etc., then your investment will be diversified, and your losses will likely be less because the fund spreads your money across different types of stock. Sheesh! This was getting super complex. I decided to take notes on my laptop while April explained that it's important to have a mix of stocks (see next page):



## LESSON 2

### Diversification

When it's time to invest your hard-earned money and help it grow for the future, you don't want to make your financial future dependent on a single investment.



Mid  
Twenties



Late  
Thirties

## DIVERSIFICATION MIX

### STOCKS FROM DIFFERENT INDUSTRY SECTORS



#### INDUSTRIES

Sometimes events happen that help or hurt almost all the companies in a specific industry. For example, if the price of oil declines, many stocks in the oil industry could suffer.

### INTERNATIONAL STOCKS AND DOMESTIC STOCKS



#### INTERNATIONAL AND DOMESTIC

Consider a mix of companies based in the U.S. and other countries.

### STOCKS OF DIFFERENT-SIZED COMPANIES



#### DIFFERENT-SIZED COMPANIES

It's good to have a mix of funds with the stocks of small, medium-sized, and large companies.

Wow, thanks for the info, April. Looks like I have a lot more research to do!



#### WHAT'S THE Big Idea?

Mutual funds offer some built-in diversification because they have more than one stock in them; however, there are many different types of mutual funds, and it's important to understand what types of investments they hold.

Name \_\_\_\_\_



## DIVERSIFICATION ACTIVITY SHEET 1



# Spread It Around!

## Economic Scenarios

The prices of stocks go up and down for many different reasons. If a company introduces an exciting new product or has good earnings results, the stock of that company usually increases. The opposite happens with bad news for that company.

Sometimes, news affects an entire industry. If more people are buying products online, the stocks of companies that sell their products through retail stores might decline. Political unrest or a natural disaster in one country might cause many stocks located in that country to decline. Then there are events that cause most stocks to increase or decrease. Prospects for good economic times usually lift most stocks, while fear of hard times depresses the price of most stocks.

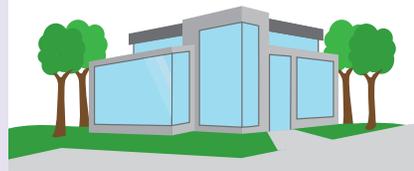
Because it's impossible to know what the future holds, it is important to diversify so that bad times for some companies don't sink your whole portfolio.

This chart shows how mutual fund **returns** can change from year to year depending on factors such as economic conditions.



### PERFORMANCE CHART

Type of Fund	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Small Biotechnology Companies</b>	+ 17%	- 37%	+ 22%	+ 10%	+ 32%
<b>Medium-Sized Airline Companies</b>	+ 19%	- 28%	+ 22%	+ 5%	+ 11%
<b>Large Companies From Many Industries</b>	+ 11%	- 6%	+ 20%	+ 7%	+ 8%
<b>International—Large Consumer Products Companies</b>	+ 6%	- 2%	+ 17%	- 5%	+ 6%



Review the chart above, then read through the five scenarios on the next page.

Name \_\_\_\_\_



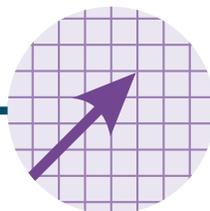
DIVERSIFICATION ACTIVITY SHEET 1

# Spread It Around!

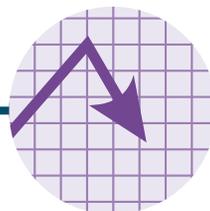
## Economic Scenarios

(Continued)

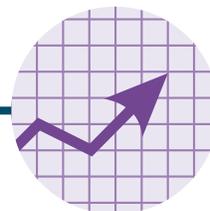
Read the five scenarios for each year, and match them to the mutual fund Performance Chart on the previous page. Notice how the economic scenarios impact whether the returns are positive or negative.



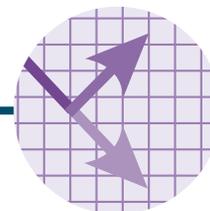
Year 1



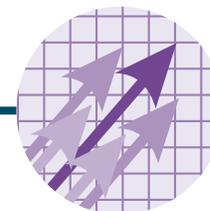
Year 2



Year 3



Year 4



Year 5

**Year 1:** All four funds had positive returns in a fairly stable market environment.

**Year 2:** The world entered a major economic recession, which caused a broad decline in global markets.

**Year 3:** Markets everywhere had significant gains, thanks to a broad-based global economic recovery.

**Year 4:** The U.S. experienced moderate economic growth, but other economies around the world declined.

**Year 5:** While all five funds had positive returns, the biotechnology fund soared, thanks to the introduction of exciting new biotechnology products.



Considering the industry fluctuations from year to year, explain why it is important to have a diversified portfolio.

---

---

---

---

Answer key: Answers will vary but should explain that the stocks of different types of companies perform differently depending on economic conditions. With a diversified portfolio, losses in some areas can be offset by gains in others.

Name \_\_\_\_\_



**DIVERSIFICATION  
ACTIVITY SHEET 2**

# Can This Portfolio Be Saved?

## Diversified Portfolio

As an investor, you want to make sure that your stock **portfolio** is adequately diversified.



The stock portion of three different portfolios is presented on the right.

The stocks in the companies they own are not spread out among different industries and don't have a good mix of domestic and international companies, or a mix of small, medium-sized, and large companies.



**Directions:** Review the portfolios and consider how they can be more diversified among different industries. Now go to the next page and find a list of recommended stocks to pick from.

(Continues on next page)



**Ms. Mehta**

Company	Industry	Size	Domestic or International
LMN Pharmaceutical	Health Care	Small	Domestic
NVM Bank	Financials	Large	International
JL Therapeutics	Health Care	Small	Domestic
Magnum Bank	Financials	Large	Domestic
GR Biomedical	Health Care	Medium	Domestic



**Mr. O'Connell**

Company	Industry	Size	Domestic or International
Magnum Bank	Financials	Large	Domestic
Gilmore Systems	Technology	Large	Domestic
Ledman Applications	Technology	Large	Domestic
TLT Dynamics	Technology	Large	Domestic
GR Biomedical	Health Care	Medium	Domestic



**Ms. Jackson**

Company	Industry	Size	Domestic or International
LLL Electric and Gas	Utilities	Medium	Domestic
TLT Dynamics	Technology	Large	Domestic
Giant Manufacturing	Manufacturing	Large	International
YY Products	Consumer Goods	Small	International
Northwest Gas	Utilities	Large	Domestic

Name \_\_\_\_\_



**DIVERSIFICATION  
ACTIVITY SHEET 2**

# Can This Portfolio Be Saved?

## Diversified Portfolio

(Continued)

**Directions:** Use the Recommended Stock List to help diversify the portfolios on the previous page. Consider substituting up to three stocks in each portfolio to make sure that their investments contain stocks in different industries.



Remember, having a mix of stocks helps minimize the risk of losing money because your investments are spread over several industries.

(Continues on next page)

### RECOMMENDED STOCK LIST

Company	Industry	Size	Domestic or International
<b>NVM Bank</b>	Financials	Large	International
<b>Overlord Exploration</b>	Energy	Small	Domestic
<b>LLL Electric and Gas</b>	Utilities	Medium	Domestic
<b>Samson Development</b>	Real Estate	Small	Domestic
<b>Giant Manufacturing</b>	Manufacturing	Large	International
<b>Peter Networks</b>	Telecommunications	Medium	Domestic
<b>GR Biomedical</b>	Health Care	Medium	Domestic
<b>Crown Mining</b>	Materials	Large	Domestic
<b>TLT Dynamics</b>	Technology	Large	Domestic
<b>YY Products</b>	Consumer Goods	Small	International



These are the changes I would make to each person's portfolio. (Explain your thinking.):



**Ms. Mehta**

---



---



---



---



---

Name \_\_\_\_\_



**DIVERSIFICATION  
ACTIVITY SHEET 2**

# Can This Portfolio Be Saved?

## Diversified Portfolio

(Continued)

**Directions:** See instructions on page 45 to make changes to the portfolios shown here.

(Continues on next page)

These are the changes I would make to each person's portfolio. (Explain your thinking.):



**Mr. O'Connell**

---

---

---

---

---



**Ms. Jackson**

---

---

---

---

---

Answer key: Ms. Mehta's financial assets are too heavily concentrated in the health care and financial industries. Consider subtracting JLT Therapeutics, LMN Networks, Crown Mining, and YY Products.  
Mr. O'Connell's financial assets are too heavily concentrated in large, domestic companies in the information technology industry. Consider subtracting Magnum Bank, Ledman Applications, and Gilmore Systems and adding three stocks from the following: Overlord Exploration, LLL Electric and Gas, Samson Development, Giant Manufacturing, GR Biomedical, and YY Products.  
Ms. Jackson has a fairly diversified portfolio already, but her assets are too heavily concentrated in utilities. Consider subtracting Northwest Gas and adding one of the domestic companies.

Name \_\_\_\_\_



**DIVERSIFICATION  
ASSESSMENT**

# Show What You Know

You don't want your financial future to be dependent on a single investment. You've learned the concept of diversification as a strategy to reduce risk of your investments losing value when negative events hurt a particular industry or company.

**1.** You have worked for a popular social media company for 15 years. During that time, you participated in the company's stock ownership plan, and the value of your account now totals \$600,000. This represents 80% of the value of your total investments. The company is doing very well and expects to do well in the future. Are your investments diversified? Explain the risk in this scenario.

---

---

---

**2.** What types of stocks should you consider owning to help you diversify your investments?

- a.) Large, medium-sized, and small companies
- b.) Domestic and international companies
- c.) Companies in a variety of industries; for example, health care, energy, technology, etc.
- d.) All of the above



**3.** Why might an investor want to own stock in companies located outside the U.S.?

---

---

---



Name \_\_\_\_\_



**DIVERSIFICATION  
ASSESSMENT**

# Show What You Know

(Continued)



4. Why is it important to diversify your investments?

---

---

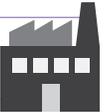
---

5. Why should an investor consider buying a stock mutual fund rather than buying the stock of a single company?

---

---

---



Answer key: (1) The portfolio is not diversified, so some of the stock should be sold so that mutual funds in many types of companies can be purchased. (2) To diversify. If the U.S. economy slows, economies of other countries might be picking up and the stocks of companies based overseas might be better performers. (3) To reduce risk. (4) To reduce risk. (5) If someone invests in one or even just a few stocks, then if those companies go bankrupt or lose value, the investor can lose a tremendous amount of money.

Name \_\_\_\_\_



# Show What You Know

**Congratulations!** You've completed the Money Confident Kids Program.

You've had the opportunity to follow Nikki as she prepared for her education and career, taking the proper financial steps to succeed in her dream career. I hope what you've learned about saving and making wise spending decisions will help you plan for a successful future.



1. List two examples of goals that have a short-, medium- and long-term time horizon.



Short Term  
(1-4 years)



Medium Term  
(5-10 years)



Long Term  
(11-30 years)

---

---

2. How can a budget help you meet your goals?

---

---

---

3. Why do you have to consider inflation when you plan financial goals?

---

---

---



Name \_\_\_\_\_



**FINAL  
ASSESSMENT**

# Show What You Know

(Continued)



4. Why do you need to consider diversification when you invest money?

---

---

5. Why would you want to adjust your allocation of cash, bonds, and stocks as you get older and have a shorter retirement time horizon?



---

---

6. What would you suggest to a person whose only investment is \$500,000 of stock in the company she works for?



---

---

Answer key: (1) Answers will vary. Short: Groceries, a new jacket. Medium: College, car. Long: Buying a home, retirement. (2) Remember that Savings = Income - Expenses. Keeping a record of your income, expenses, and savings can help you find opportunities to reduce your expenses, increase your income, and save more money. (3) If you don't consider inflation, you might find that something you've been saving for over the long term has gone up in price and you can't afford it. Diversification reduces risk. (4) Without adequate diversification, the value of your investments might suffer if a certain company or type of company declines in value. (5) As people get closer to retirement, they tend to allocate more to bonds and less to stocks. This reduces their risk, since they will need the money pretty soon and won't have a lot of time to bounce back if their stocks decrease in value. (6) Having an investment in the stock of a single company is risky. If the company's business doesn't do well, then the stock will lose some or all of its value. If a person's investments are diversified, then a loss in one company won't be as devastating.

# Conclusion

## Good-bye and Good Luck

Hey guys, it's Nikki...and guess what? I just got the best birthday present EVER! I was named president of Batt Software. I achieved my career goal at age 38! Now I have dreams of developing products that help people around the world and keep the company financially strong. I've also managed to reach my personal financial goals. I have enough cash in savings in case an unexpected expense like a car repair or a medical bill comes up, and my investments, including my retirement account, are doing well. Sometimes, they go up, and sometimes, they go down, but I don't stress about it because I'm properly diversified *and* because I won't need to use the money for many years. I moved into a house that's big enough for my family, and I'm making timely mortgage payments and building a good credit rating. And I'm happy to tell you that I have two wonderful children! They're young now, but I've already started saving for their college education. I can't wait to teach them about how to make smart money choices the way my family taught me.

What's my secret? Well, I started by sorting out my goals when I was a middle schooler like you, focusing on what was important to me over short-, medium-, and long-term time horizons. I got lots of advice from people with experience in financial matters. And once I set my goals and learned how to achieve them, it was a matter of hard work and discipline. I gave up the momentary pleasure of things that really didn't matter to save for the important things. And let me tell you, changing my habits and planning for the future was SO worth it!

I'm proof that it's never too early to learn good money habits. I know that you can do it too!



## THANK YOU

We hope you enjoyed this program and are inspired to think about your future and how careful financial planning can help you reach your goals.



Late  
Thirties



GOAL

# Glossary

## Language of Money

Money words help you talk dollars and cents. As you learn more about creating realistic goals and investing your money, you'll encounter a lot of new words. Learning the "language of money" can help you make smart financial decisions and talk about money with others—like your family and other adults.



### MONEY WORDS GLOSSARY

A **401(k) Plan** is a savings plan companies offer that allows their employees to prepare for retirement. Employees make contributions to the plan from their salary, which may be matched by their employer. Any gains in employee accounts are not taxed until the employee withdraws their money, so the account can grow tax-free until retirement.

An **account** is a place to put your money. You can have an account at a bank, credit union, or other financial institution. A checking account is a bank account used for cash deposits and withdrawals on a day-to-day basis. A savings account is also a bank account but used primarily to save money and potentially earn interest.

An **allowance** is money given to a person on a regular basis for his or her personal spending. Many kids are given an allowance by their parents for doing chores at home.

An **asset** is anything that has a financial worth. Cash, savings accounts, stocks, bonds, mutual funds, houses, and cars are examples of assets.



**Asset allocation** is how your money is divided among stocks, bonds, and short-term investments. For instance, you can put some of your money in a savings account and invest some money in stocks, bonds, and mutual funds. If you have a long-term goal, consider investing most of your money in stocks. As the goal gets closer, you may want to hold less in stocks and more in bonds and short-term investments.

A **bond** is an asset issued by the federal government, state governments, or corporations. When you buy bonds, you are lending your money to the organization. Bonds generally pay interest (usually more than a savings account) every six months, and you receive the original amount you loaned the organization plus interest earned at the end of a specified time. Unlike a savings account at a bank or credit union, state and corporate bonds are subject to risk—which means you could lose some or all of the money you invested. Federal bonds are backed by the United States government.



A **budget** is a plan of how much money a person or business has to spend and how it will be spent. For instance, your home budget might include rent, utilities, food, clothing, health care, car payment, pet care, and insurance.



A **credit card** is a small plastic card issued by a bank or business that lets you buy goods

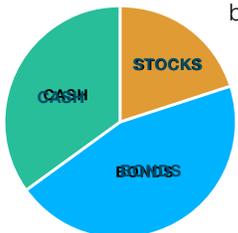
or services with the promise that you'll pay at a later date. When you "charge" goods or services on a credit card, you are borrowing someone else's money—and you have to pay it back, usually with interest.

A **Credit rating** measures the probability that you will repay a debt such as a credit card bill, auto loan, or mortgage. The higher your credit rating, the more likely you will be able to get a loan or credit.

**Debt** is money you owe when you buy on credit or borrow from someone else. Any money you have to pay back can be considered debt.

A **deposit** is money you put in your account.

**Diversification** means having lots of different kinds of investments (different types of stocks, different types of bonds, etc.). For example, if you invest in skateboard stock and kids stop buying skateboards, you could lose all the money you have invested. Instead, if you invest money in skateboards, pizza, and computers, and kids stop buying skateboards, you might lose only the money you invested in skateboards—not all of it. Diversification cannot guarantee that your investments will make money or protect against loss if the market goes down.



A **Down payment** is a partial payment made at the time you make a purchase, with the remainder due over a given time period. Used primarily for larger purchases such as a house or car.

**Expenses** are the amount you pay for purchases such as food and clothing; also includes payments for rent, a mortgage, or other regularly scheduled bills.

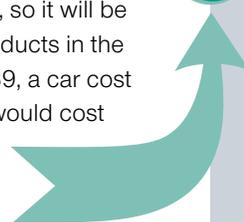
**Financial Planning** is deciding on the most important goals for your future and carefully saving and investing so you can meet these goals.

**Financial strategy** is a financial plan that helps secure your financial future that includes your daily expenses along with larger items such as a house, car, and saving for retirement. This strategy includes a plan for saving and investing your money.

**Income** is the amount of money you regularly receive from sources such as your job, investments, pensions, and Social Security.

**Industry sector** is a group of companies that produce similar products or services, for example, agriculture, mining, banking, and financial services.

**Inflation** is the general increase in the price of goods and services. Money loses value due to inflation, so it will be more expensive to buy products in the future. For example, in 1939, a car cost \$400. A similar car today would cost almost \$30,000 at a 3% rate of inflation.



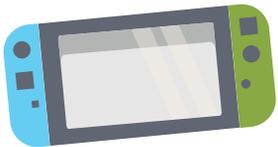
**Insurance** helps protect individuals or companies by paying them if they suffer losses due to fire, theft, or injury. Individuals can also buy life insurance to pay their dependents in case they die.

**Interest** can be an amount of money an investment earns or an amount of money that is added to money you borrowed. If you have a savings account, your money can earn interest—and then you'll have even more money. However, if you borrow money (like using a credit card), you will have to pay interest on top of what you borrowed. That's expensive.

You **invest** by putting money into assets (such as stocks, bonds, or mutual funds) to help you reach your financial goals.

An **investment** is anything that you buy in hopes that it will increase in value.

A **loan** is money that's borrowed and expected to be repaid, usually with added interest.



A **luxury** is something you don't need. It can be a material object or a service that you want but could live without.

For example, you need shoes to wear, but you don't need to buy the most expensive pair or a new pair every month.

A **mutual fund** combines the money of many investors who have common financial goals into a professionally managed portfolio. Mutual funds take the money and buy many different stocks, bonds, and/or short-term investments (depending on what kind of mutual fund it is), giving small investors access to a well-diversified portfolio. Each investor shares in the gain or loss of money in the mutual fund.

**Needs** are the basic things necessary to live or do your job (such as a place to live, food, clothes, or transportation to work). Needs are often confused with wants. For instance, you may need transportation to work and school, but you don't need a \$40,000 sports car. You may want a sports car, but you don't need it.



A **portfolio** is a group of investments owned by a person, investment company, or financial institution. Your portfolio should include different types of investments.

**Retirement** is the period in someone's life after they have stopped working because they have reached a particular age.

A **return** is the gain (or loss) of money from an investment in a particular time period.

**Risk** comes in many different forms. Two types of risks are the risk of losing money and the risk of not gaining enough to reach your goal. Your asset allocation helps you keep the right balance of these risks for your goal. Another risk you'll face is having most or all of your money in an investment that does worse than your other choices. Diversification helps reduce how much of this risk you have.

**Savings** are how much money you have in your bank account, brokerage accounts, and retirement accounts (a 401(k) plan, for example).



A **savings account** is one place to put your money to help achieve your financial goals. When you put your money in a savings account, the bank "borrows" your money and pays you interest. Please note that while money invested in savings accounts is usually insured against loss, you earn a very low interest rate.



A **stock** is a share of a company that is sold to the public. Companies sell stocks to raise money to finance business operations. Stock prices can change daily. As an investment, stocks have produced the highest long-term returns over the past several decades. They also have had the biggest swings in performance and are subject to much greater short-term risk of losing money. Of course, just because something happened in the past doesn't mean it will happen again.

The **stock market** is where shares of stock of different companies are bought and sold.

A **stockholder** (or shareholder) is a person who owns stock (shares) in a company.

**Time horizon** is how long it is before you plan to spend your money on a specific goal. This determines how your money should be divided between stocks, bonds, and short-term investments.



Something you need immediately or within a few years (under 4 years) has a **short-term time horizon**.



Something you save for over several years (between 5 and 10 years) has a **medium-term time horizon**.



Something you save for that will happen many years or decades in the future (over 10 years), like retirement, has a **long-term horizon**.

**Wants** are things you don't need to live or do your job. For example, you might want to eat out every day, but you don't need to. A want can also be considered a luxury.





# MONEY CONFIDENT Kids®

Presented by **T.RowePrice®**

© 2022 T. Rowe Price. All rights reserved.  
Distributed in the USA by T. Rowe Price Associates, Inc.  
T. ROWE PRICE and MONEY CONFIDENT KIDS are trademarks or registered trademarks of  
T. Rowe Price Group, Inc. in the USA and other countries.

U.S. Version  
CCON0038795 202211-2584364

