#### NTC Financial Literacy K-12 Curriculum

MONEY SMART 2.0 TEACHER Presentation Slices for Grades 3-5



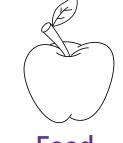
The National Theatre for Children

## WHAT ARE NEEDS AND WANTS?

A need is something that you cannot live without.



Water







Shelter





**Medical care** 

A want is something you would like, but can live without.



## STORY PROBLEMS: OPPORTUNITY COSTS

### **CHALLENGE 1**

An opportunity cost is the trade-off of making one choice over another. When you make a choice, you give up something else.

Directions: Read each situation below to identify the opportunity costs.

- 1. Tanisha has a soccer game next Saturday. She was invited to a friend's birthday party on the same day. Tanisha has to decide whether she should go to the soccer game or the party. If Tanisha chooses to go to the party, what is the opportunity cost (the trade-off)?
- 2. James has **\$5** to spend on lunch. He is trying to decide whether he should buy a chicken sandwich or a hamburger. Both meals cost **\$5**. What is the opportunity cost if James chooses the hamburger?
- 3. You can either walk or ride your bike to your friend's house. What is the opportunity cost of each choice?

## STORY PROBLEMS: OPPORTUNITY COSTS

### CHALLENGE 2

An opportunity cost is the trade-off of making one choice over another. When you make a choice, you give up something else. That "something else" may be time, money or another resource.

Directions: Read the situation below and choose the best answer to the question.

- Trey decided to go with friends to see a movie on Sunday afternoon from 2:00 pm to 3:30 pm. The cost of the movie ticket was \$9.50. What was the opportunity cost of Trey going to the movie?
  - a) the time he gave up to go see the movie
  - b) his friends not paying for his movie ticket
  - c) \$9.50, the money he spent on a movie ticket
  - d) the time he gave up and the **\$9.50** he spent

## STORY PROBLEMS: OPPORTUNITY COSTS

### CHALLENGE 3

An opportunity cost is the trade-off of making one choice over another. When you make a choice, you give up something else. That "something else" may be time, money or another resource.

Directions: Read the situation below and choose the best answer to the question.

- Sarah went to the mall with her friends on Saturday morning for three hours. Before they left, they had lunch at the food court. Sarah paid \$9.50 for her meal. She normally walks her neighbor's dog on Saturday morning and makes \$5. Her brother walked the dog instead and was paid \$5. What was the opportunity cost of Sarah going to the mall?
  - a) **\$5**, the money she gave up by not walking the dog
  - b) the use of the **\$9.50** that she spent on lunch
  - c) **\$14.50**, the cost of lunch, plus the **\$5** not earned
  - d) the **\$14.50** (lunch and money lost) and time

## **SPEND OR SAVE?**

When you get money, Smart Bucks or classroom points/rewards, you ...

- a) spend all of it right away
- b) spend some of it and save the rest
- c) save all of it



#### **SPENDING HABITS**

## STORY PROBLEMS: SAVINGS GOAL

### **CHALLENGE 1**

A savings goal is an amount you plan to save your money toward. You may want to use the money to buy a gift or something for yourself.

Directions: Read the situation below to answer the questions.

Jackie has **\$6** saved. She can make **\$5** a week by helping her dad pull weeds from the yard. Jackie wants to buy a new hula hoop. The one she wants is **\$13**.

- 1. What is Jackie's savings goal?
- 2. How much more does she need to save to buy a hula hoop?
- 3. How long will it take her to save enough money for the hula hoop?
- 4. Is buying the hula hoop a short-term goal or a long-term goal?

## STORY PROBLEMS: SAVINGS GOAL

### CHALLENGE 2

A short-term savings goal is an amount of money you plan to put aside to buy something soon.

Directions: Read the situation below to answer the questions.

Sam has saved **\$10**. He has plans to go ice skating with his friends next Saturday, which will cost him **\$8.25**. Sam also wants to buy a basketball for his brother's birthday in two months. He found one on sale for **\$16**. Sam can make **\$3** every week, starting next week, by feeding the neighbor's cats.

- 1. What are Sam's short-term savings goals?
- 2. After Sam goes ice skating, how much money will he have left from his savings?
- 3. How much more does Sam need to save to buy the basketball?
- 4. How long will it take Sam to save enough money for the basketball?

# HOW TO SET GOALS

A long-term savings goal is an amount of money you plan to put aside to buy something in the future. Setting goals can help you save.

Here are some tips for setting a savings goal:

- 1. On a piece of paper, write down a future purchase you want to save money toward.
- 2. Figure out the cost and write it down.
- Set dates for when you would like to reach your goal.
   For a large savings goal that may take a long time to reach, set dates to reach smaller goals along the way.
- 4. Write a plan for how you will achieve the goal.
- 5. Keep track of your progress every week or month.
- 6. If you see you need more time, set new dates. You can also save more money or change your savings goal.



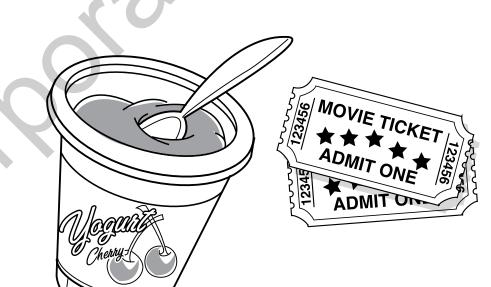
Sun	Mon	Tue	Wed	Thu	Fri	Sat
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

# HOW MUCH IS \$10,000

#### You just won \$10,000. Congratulations!

Each example below is something you may be able to buy for about \$10,000:

- A trip for four to another country
- 10 large flat-screen televisions
- 10 refrigerators
- 20 laptop computers
- 100 skateboards
- 1,000 movie tickets
- 10,000 small containers of yogurt



## **STORY PROBLEMS: BUDGET**

#### A budget is a spending plan to help you manage your money.

Directions: Read the problem below and answer the questions.

You just won \$10,000! Now imagine that you are grown up. Your winnings will be your only income for the next six months. (Then you start a new job.)



- 1. How much money will you have left after the first month?
- 2. How much money will you have left after five months?

### **SPENDING LIMITS**

A spending limit is a limit to the amount of money a person can spend.



# PAY YOURSELF FIRST

What does **pay yourself first** mean? When you receive money, make sure to save some of it before you spend it.

Pay yourself first by deciding how much to save. Let's say you decide to save 10% of your money. That means you would save:

- A dime (10 cents) for every \$1
- \$1 for every \$10
- \$2 for every \$20

Based on the example above (saving 10%), answer these questions:

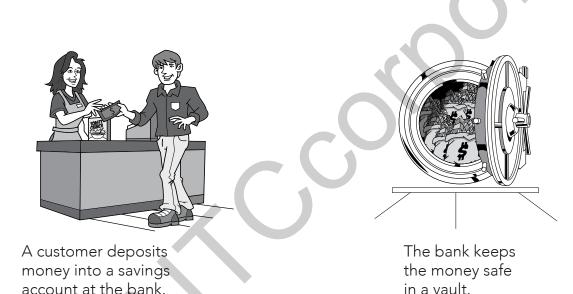
- 1. How much money would you save if you had \$50?
- 2. How much money would you save if you had \$100?

## **HOW DO BANKS WORK?**

After you open a savings account, you can put money in (make a deposit) and take money out (make a withdrawal).

The bank keeps your money safe and pays you interest.

Why does the bank pay you? When you have a savings account, you are lending money to the bank. The bank lends your money to other people. They pay the money back to the bank with interest. The bank gives you a small amount of the money they make.





The bank loans money to other people, who pay interest. That interest goes back to the customers saving their money in the bank.

## **STORY PROBLEMS: RISKS**

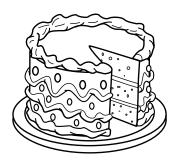
### **CHALLENGE 1**

A risk is the possibility that something bad might happen.

Directions: Pick one of the scenarios below. On a separate piece of paper, create a chart to show the risks and ways to avoid or reduce each risk.

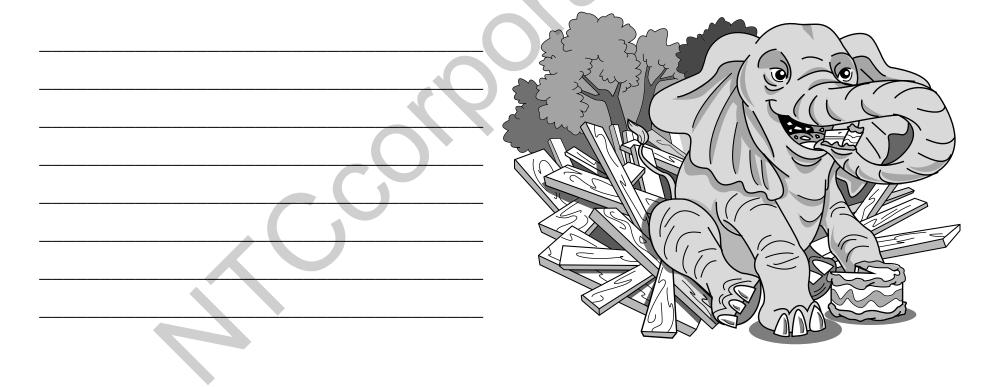
- 1. Someone just gave you an elephant as a gift.
- 2. A friend comes over to help you build a tree house.
- 3. You decide to bake a five-layer chocolate cake.





## SAVING FOR EMERGENCIES

Risks carry the potential to cost people time, effort and money. That is why it's important to save money for an emergency. Bad news: Your pet elephant just ate the cake you baked and then sat on your new tree house. That is going to cost you a lot of money! List some of the possible expenses below:



## **REAL-LIFE EMERGENCIES**

If you were a grown-up, here are some emergencies that you might have to save money for:

- An unplanned hospital stay
- A sick or injured pet needs to go to the vet
- A broken washing machine that needs repairs
- Worn out tires that need to be replaced
- Paying the bills after a job loss

What other emergencies might grown-ups need to save for?

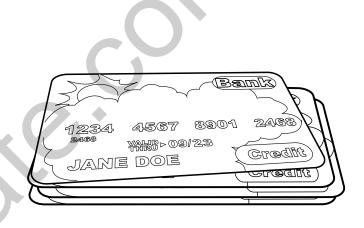
## WHAT IS CREDIT?

**Credit** is a loan. When you pay using credit, you are borrowing money.

A **credit card** is a plastic card that lets you pay using credit. The card has a limit on how much you can **charge** (spend).

Each month, you receive a credit card statement. It is a record of your purchases and how much you owe. If you don't pay all the money back on time, you have to pay it back with interest.

• For example, let's say your October credit card statement shows you owe \$250. The money is due by November 5th. If you can, you should pay back the \$250 on time. If you can only pay back \$100, then you would owe \$150 plus interest.



## WHAT IS CREDIT?

Money experts give this advice: Only use a credit card for things you can afford. Then pay all of the money back on time. Otherwise, you might have to pay a lot of money in interest. Money you owe is called **debt**. If you don't pay it back on time, that debt can grow and grow. Why use **credit cards**? They are a quick and convenient way to pay. They can also help in an emergency. For example:

- Let's say you have no cash left and you need to buy lunch. You can pay using a credit card.
- You might need to have your bicycle repaired. When you go to pick it up, you find out that you owe \$100. If you only have \$45 cash, you can pay with a credit card.
- Soccer practice is in 30 minutes and you are at the mall shopping for a new pair of cleats. They cost \$40 and you have \$50 cash (all in \$1 and \$5 bills). You are in a hurry to get to practice, so instead of counting out your money, you pay with a credit card. That way, you can pay faster.

Many credit cards also give people points each time they make a purchase using the card. After people have enough points, they can trade the points in for cash, discounts or other rewards.

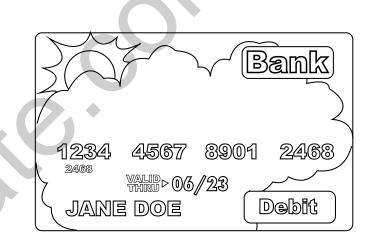
## WHAT IS DEBIT?

#### A **debit** is money removed from an account.

A **debit card** is a plastic card that takes money out of your checking account.

When you use a debit card, the money is **deducted** (subtracted) immediately from your account.

If you don't have enough money in your account to make a purchase, you can't pay with your debit card. For example:



- Let's say you have \$350 in your checking account. You want to buy a new pair of jeans. The jeans cost \$30 and you pay with your debit card. That \$30 is then deducted from your account. You now have \$350 minus \$30 in your account, or \$320 left.
- If you only have \$25 in your checking account, can you use your debit card to pay for \$30 jeans? No, because you don't have enough money in your checking account.

### WHAT IS DEBIT?

Checks are another form of debit. They are paper forms that a person fills out to make a payment. Checks come in a small book called a checkbook.

When you pay by check, the money is also deducted from your checking account. If you want to buy those \$30 jeans and you have \$350 in your checking account, you can also pay with a check. When the store deposits the check you wrote, the money is deducted from your account. You now have \$350 minus \$30 in your account, or \$320 left.

If you write a check for more money than you have in your account, you may have to pay a lot of extra fees. To keep from owing extra fees, make sure you have enough money in your checking account before you write a check. For example:

• You need to write a check next week to give to your piano teacher. You owe him \$125, but you only have \$100 in your checking account. What can you do? You can go to the bank to deposit more money into your checking account ahead of time. If you deposit another \$100, you will have \$200 in your account. Can you write a check to your piano teacher now? Yes! And you will still have money left over in your checking account. How much will you have left?

# STORY PROBLEMS: PAYMENT DECISIONS

People can make purchases using different payment options.

Directions: Read each scenario and answer the questions to make payment decisions.

- 1. Violet has **\$20** cash and her checkbook. She is in a hurry and needs to pay for a birthday card that costs **\$3**. How should she pay for the card? Why?
- 2. Sierra and her grandmother go out for lunch. Her grandmother needs to pay \$32 and has \$35 in her wallet, along with a credit card. She wants to make sure she has at least \$5 left for the rest of the day. How should Sierra's grandmother pay for the meal? Why?
- 3. Max has to pay his credit card bill. It is due in two weeks. Max wants to mail in a check for the total amount of \$135. He has \$100 in his checking account. Does Max have enough money to write the check? If not, how can he still pay by check?

## **PRIVATE INFORMATION**

Some information should be kept personal. It should not be shared with anyone without a parent's permission, especially when you are online.

Here is some personal information you should keep private:

- Birth date
- Phone number
- Home address
- Bank account number
- A parent's credit card number
- Passwords
- School name and address

## **PRIVATE INFORMATION**

Following this rule can help keep you safe. It can also help prevent **identity theft**. An identity is who someone is. Identity theft is a crime. It is when someone pretends to be another person by taking that person's personal information to steal money. For example:

- A thief might steal someone else's credit card number to buy things online. Then the bill is sent to the owner of the credit card, not the thief. Let's say your parent's credit card number was stolen. On the next statement, your parent notices a charge for 50 pounds of lizard food. Wait a minute — you don't have a pet lizard! Now your parent has to call the credit card company and report a theft.
- Let's say you are using the computer and you get a pop-up ad. It says you can win a prize if you click on the ad. Don't click on the ad! But if you did click on the ad, it might ask you to enter personal information so you can collect your prize. NEVER enter personal information without a parent's permission. If you do, someone may use the information you entered to steal your identity.

# **INVESTING YOUR MONEY**

The goal of investing is to make money in the future. Here are three different investment options:

#### CD (Certificate of Deposit)

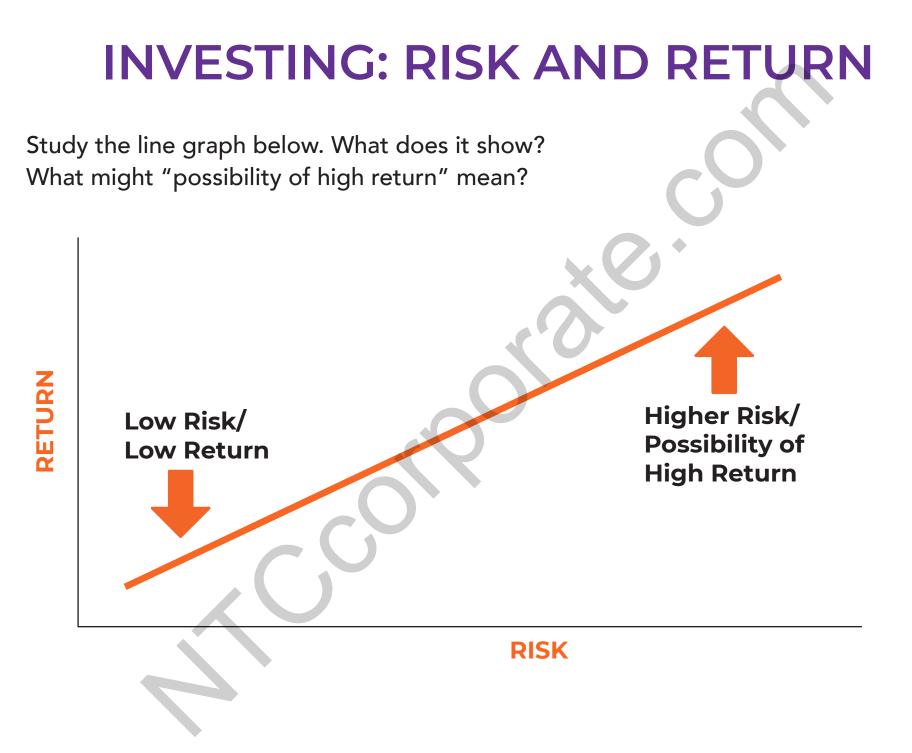
• A CD is a certificate sold by a bank. When you buy a CD, you lend money to the bank for a set amount of time. It can be several months to five years. At the end of the set amount of time, the bank pays you back the money with interest.

#### Bond

• A bond is a certificate sold by a company or government. When you buy a bond, you lend money to a company or government for a set amount of time. It can be as long as 30 years. The borrower promises to pay your money back with interest. If they are not able to pay the money back, you could lose your money.

#### Stock

• A stock is a share of a company. When you buy stock in a company, you own a tiny piece of a company. If the company makes a profit, it may share some of those profits with you. Those profits may be called a dividend. You can also make money by selling your shares to another buyer for more than you paid. If a company does not make a profit, however, you could lose your money.



## **STORY PROBLEMS: INVESTING**

The goal of investing is to make money.

Directions: Choose the best answer to each question below.

- Jay does not like to take risks. He just bought a one-year CD from the bank. He knows it is low risk. How much money will he probably make next year from the CD?
  - a) no money
  - b) a little money
  - c) double his money

# **STORY PROBLEMS: INVESTING**

2. Maya has a lot of money saved and wants to invest some of it. She wants to take a risk with her money so she has a chance of making a lot of money back. She wants to use the money to start her own restaurant one day. What kind of investment should she make?

a) stocks

b) one-year CD

c) U.S. bond

3. Your friend Kelvin asks what you know about company bonds. He is thinking of buying one. He is sure he will make a lot of money if he does. What would you tell him about company bonds?

a) They are as safe as U.S. government bonds.

b) They can be risky, but you might make a lot of money, too.

c) They are known for making almost no money in return.

## WHAT IS INFLATION?

**Inflation** is the overall rise in prices. For example, a gallon of milk today costs more money than it did 10 years ago.

A gallon of milk will cost more in the future than it does today. Read the graph below to learn more. Then answer the questions.

Average Price of a Gallon of Milk				
2004 – \$2.88	2012 - \$3.58			
2006 – \$3.20	2014 - \$3.55			
2008 – \$3.87	2016 – \$3.31			
2010 - \$3.24	2018 – \$2.96			

Source: data.bls.gov/cgi-bin/surveymost?ap Note: Data taken from January each year

- 1) What was the average price of a gallon of milk in 2004?
- 2) Which year shows the biggest increase in the average price of milk?
- 3) In which years did the average price of milk get lower?
- 4) How much more was the average cost of a gallon of milk in 2014 than in 2004?

## WHAT IS PROFIT?

When you raise money for a charity, you may have to spend money first – also known as your **expenses**. The difference between the total money you make – your **income**, and what you spend – your expenses, is your **profit**.

See the examples below:

1. Jamal and his sister sold lemonade to raise money for charity. On the weekend, they made \$25. They spent \$8 to buy the lemons and plastic cups, and \$2 to buy poster board to make a sign. (Their parents gave them sugar and a pitcher for the lemonade.)

```
Income: $25
Expenses: $8 + $2 = $10
Income ($25) – Expenses ($10) = Profit ($15)
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- 2. Maya held a raffle and party to raise money for charity. She asked friends to donate items they no longer use. At the party, guests bought raffle tickets for items they wanted to win. Maya paid **\$10** for the raffle tickets and **\$15** for the food. At the party, the kids spent **\$65** buying raffle tickets.
  - What was Maya's income?
  - What were her expenses?
  - What is her profit?

# MR. VEGA'S CLASS GIVING PLAN AND BUDGET

A budget is a spending plan to help you manage your money. You can make giving part of your budget.

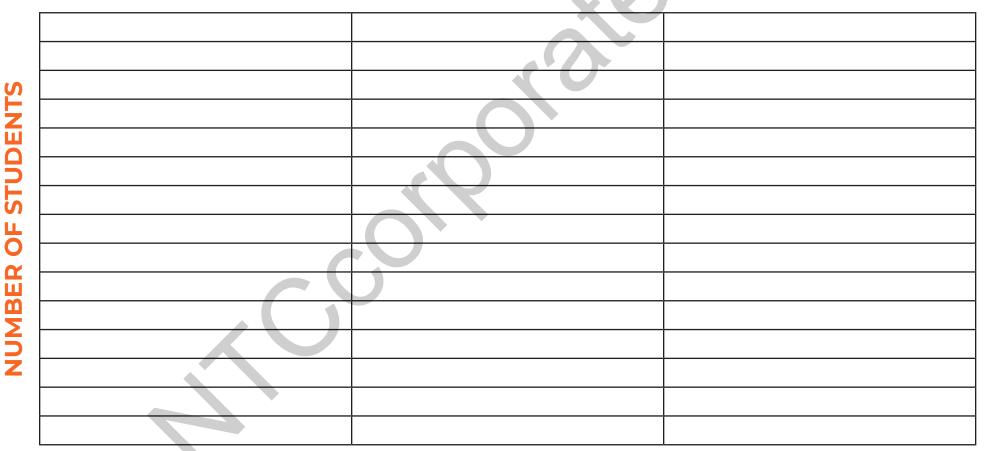
Directions: After completing the *Story Problem: Giving* handout, study the giving plan and budget of Mr. Vega's class below.

Giving (Money we expect to give) Local animal shelter	\$100				
Income (Money we expect to make) Selling animal magnets (\$2 each)	\$124				
Expenses (Money we expect to spend)					
Art supplies	\$14				
Magnets	\$10				
Total Expenses	\$24				

- 1) Why do students need to sell **\$124** worth of magnets to raise **\$100** for the animal shelter?
- 2) What else could students have sold to raise money?

### **CHARITY VOTE**

Write the names of three or four charities in the boxes below. Take a class vote to decide which charity to help. Fill in the boxes to show how many votes each charity received. Focus your class project on the charity with the most votes.



#### NAME OF CHARITY

### **FUNDRAISING IDEAS**

How many classroom fundraising ideas can you come up with to help the charity of your choice?

Read the ideas below to get started. Then add your own ideas to the list. (Make sure you get permission from your teacher and principal before you start your project.)

- Put on a talent show, play or concert. Sell tickets to the performance.
- Make tie-dye t-shirts to sell to other students. Write the name of the charity on the back.
- Challenge other classrooms to see who can collect and donate the most coins. Make an award for the winning classroom.

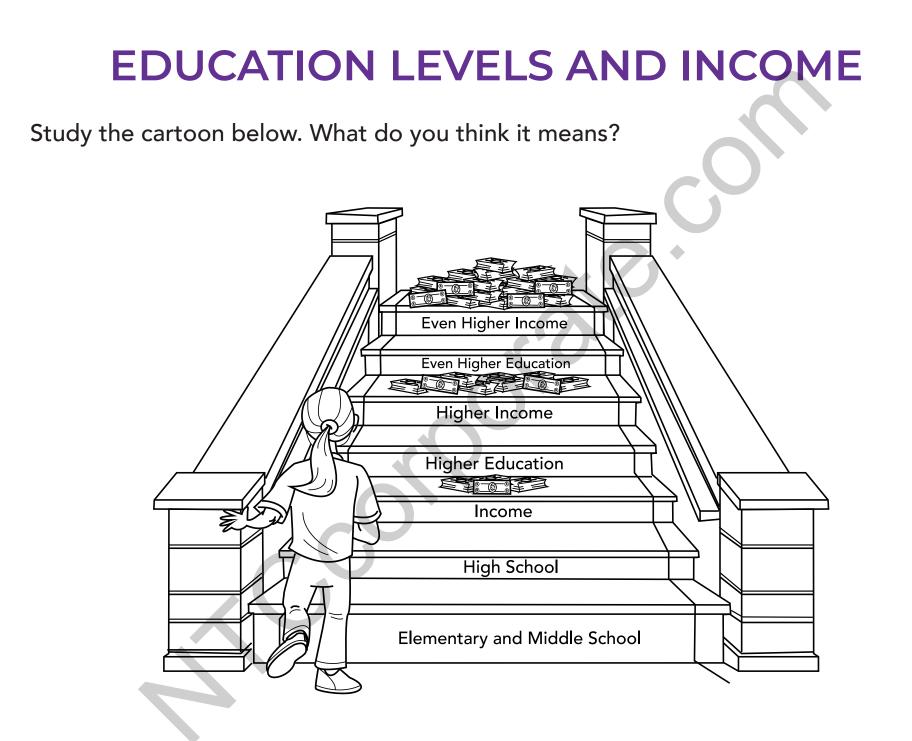


### **INTERESTS AND JOBS**

You can choose from hundreds of different jobs. Here are just a few jobs you might want to learn more about based on your **Interest Survey** answers:

- □ I care about people and their problems. (physician, psychologist, social worker, pharmacist, lawyer)
- □ I enjoy taking care of animals. (veterinarian, biologist, wildlife rehabilitator)
- □ I like to design and build things. (architect, engineer)
- □ I enjoy being outdoors and studying nature. (biologist, environmental scientist, geologist)
- □ I like to take things apart to figure out how they work. (engineer, chemist)
- I am interested in taking care of the environment. (environmental scientist, conservationist, environmental engineer)
- □ I enjoy using the computer and learning new programs. (software developer, web developer)
- □ I am good at math and like to solve math problems. (financial analyst, statistician)
- □ I like figuring out the answers to complex problems. (scientist, engineer)
- □ I am good at drawing and am interested in art. (architect, graphic designer, art museum curator)

Note to students: This is not a complete list. You can research many other jobs based on interests and skills that are not on the list. Go to www.bls.gov/k12/students.htm and kids.usa.gov/jobs/index.shtml for more information.



### **BUREAU OF LABOR STATISTICS**

The Bureau of Labor Statistics (BLS) is a government agency. It is part of the U.S. Department of Labor. The agency was created in 1884.

The BLS publishes the *Occupational Outlook Handbook*. It is a guide with career information about hundreds of different jobs. The guide also gives salary and education level information. Here is an explanation of some higher-education levels:

HIGHER-EDUCATION LEVEL	AVERAGE YEARS OF SCHOOL	
Non-degree award	A few weeks to 2 years	
Associate's degree	2 years	
Bachelor's degree	4 years	
Master's degree	1 to 2 years after Bachelor's degree	
Doctoral degree	5 to 6 years after Bachelor's or Master's degree	

Source: www.bls.gov/ooh/about/glossary.htm

### HOW IS INCOME TAX SPENT?

Income is taxed. Here are some ways the government uses that money:

- Public education
- Libraries
- Transportation
- Road and bridge repairs
- National security and safety
- Science and medical research
- Benefits for U.S. veterans
- Benefits for retired workers
- Programs to help low-income families buy food
- Health care for seniors and people with low incomes

# Teacher Presentation Slides Answer Key

### LESSON 1: STORY PROBLEMS: OPPORTUNITY COST

Challenge 1:

- 1. The opportunity cost is the soccer game.
- 2. The opportunity cost is the chicken sandwich.
- 3. If you choose to walk, the opportunity cost is riding your bike. If you choose to ride your bike, the opportunity cost is walking.

Challenge 2:

1. D

Challenge 3:

1. D

### LESSON 2: STORY PROBLEMS: SAVINGS GOAL

Challenge 1:

- 1. \$13 [for a hula hoop]
- 2. \$7 [\$13 \$6 = \$7]
- 3. two weeks [she makes \$5 a week]
- 4. short-term goal

Challenge 2:

- 1. \$8.25 to go ice skating and \$16 to buy a basketball
- 2. \$1.75 [\$10 \$8.25 = \$1.75]
- 3. \$14.25 [\$16 \$1.75 = \$14.25]
- 4. 5 weeks [\$14.25 ÷ \$3 = 4.75 weeks, which would take 5 weeks, or since \$3 x 4 weeks = \$12, which is not enough, and \$3 x 5 weeks = \$15, Sam would have to work 5 weeks]

### LESSON 3: STORY PROBLEMS: BUDGET

- After the first month, you will have \$8,200 left.
   [\$10,000 \$1,800 = \$8,200]
- 2. After 5 months, you will have \$1,000 left.
  [\$1,800 x 5 = \$9,000, \$10,000 \$9,000 = \$1,000]
- 3. Rent \$910 or car payments, food and gasoline [\$410 + \$200 + \$100 = \$710]

### PAY YOURSELF FIRST

- 1. 5[50 is 10 + 20 + 20, so 10% of 50 is 1 + 2 + 2 = 5]
- 2. \$10 [\$100 is \$50 x 2, so 10% of \$100 is \$5 x 2 = \$10]

### LESSON 4: STORY PROBLEMS: RISK

Answers will vary.

### SAVING FOR EMERGENCIES

Answers will vary.

### **REAL-LIFE EMERGENCIES**

Answers may include: other home repairs if something breaks, other car repairs, taking a sick child to the doctor and so on.

Money Smart 2.0: Grades K-2 Teacher Answer Key

### LESSON 5: WHAT IS DEBIT?

\$75 [\$200 - \$125 = \$75]

### STORY PROBLEMS: PAYMENT DECISIONS

- 1. She should pay with cash. It's faster and she has enough cash.
- 2. She should pay with a credit card. She wants to have \$5 cash for the rest of the day, and if she pays with cash, she will have only \$3 left.
- 3. No. He can pay by check after he deposits more money into his checking account.

### LESSON 6: INVESTING: RISK AND RETURN

Answers will vary, but may include: It shows that low risk has low returns. The possibility of high return means that a high return is possible, but not a guarantee.

### STORY PROBLEMS: INVESTING

- 1. B
- 2. A
- 3. B

### WHAT IS INFLATION?

- 1. \$2.88
- 2. 2008 [\$3.87 \$3.20 = \$0.67 increase]
- 3. 2010, 2014, 2016, 2018
- 4. \$0.67 [\$3.55 \$2.88 = \$0.67]

### LESSON 7: WHAT IS A PROFIT?

 Maya's income was \$65. Her expenses were \$25 [\$10 raffle tickets + \$15 food]. Her profit is \$40 [\$65 - \$25 = \$40].

### MR. VEGA'S CLASS GIVING PLAN AND BUDGET

- 1. Their expenses were 24 [100 + 24 = 124].
- 2. Answers will vary.

### **FUNDRAISING IDEAS**

Answers will vary.

### LESSON 8: EDUCATION LEVELS AND INCOME

Answers will vary, but may include: The more education you have, the more income you might make.