Lesson | Smart Saving

Objective

- Define and identify the differences between saving and investing
- Evaluate the risks associated with investments
- Explore the costs of using credit cards to make purchases

Time

45 Minutes

Materials

- Dollar Dilemmas, printable
- Dice
- Coins
- Paper
- Pencil
- Road to Riches Game, optional
- Cash Cards Interactive, optional

• Your students can work their way through the world of saving, giving, and budgeting with the interactive Road to Riches adventure game! And have your students practice their vocabulary with these interactive Cash Cards.

PART I-Vocabulary/Concept Development

Begin by telling this story: Pretend you owned two big dogs, Digger and Dreamer. Each of the dogs went to work every day at the We Dig Holes company. Digger was a very good worker. He loved digging holes. Every day he dug exactly five holes and every day he earned exactly \$5, which *he brought home to you. Dreamer also loved* digging holes, but he also liked to take naps under the big shade tree. So on some days Dreamer dug six holes and earned \$6, which he brought home to you. Some days he dug eight holes and earned \$8. And one day he even dug 10 holes and earned \$10. However, on some days instead of digging holes, Dreamer napped under the big shade tree. And on those days, Dreamer didn't earn any money, and he didn't bring any money home to you. But at the end of every day, Digger and Dreamer both give you big, sloppy, wet dog kisses, and you just laugh while you give them their favorite doggy treats.

Digger and Dreamer are a lot like savers and investors. Like Digger, savers put their money to work in a bank or credit union, where it earns the same amount of money every day. But like Dreamer, investors put their money into businesses to help them grow and be successful. Sometimes the businesses are very successful and the investor earns a lot of money. But if the business doesn't do well, the investor may not make any money and could even lose all the money that he put into the business.

- 2. Savings—money deposited in an account at a bank or credit union. The money earns a stated amount of interest.
 - Account—a record of any savings or investment
- **Investments**—money deposited into an account that represents a business. This money can earn dividends if the business does well, but money can be lost if the business does not do well.
- **Principal**—amount of money that is put into an account. This is the money that you put to work.



- **Dividend**—amount of money that the principal earns on an investment
- **Deposit**—to put money into an account
- Withdraw—to take money out of an account
- **Balance**—amount of money that remains in the account at any time

PART II—Hands-On Activity

Activity 1 will simulate the growth of money in a savings account. Explain to students that saving money is part of a greater plan. People may save money for many reasons. They may want to buy a car, so they save enough money to buy the car. Or they want to go on a vacation, so they save enough money to go on the vacation. In this game, the goal is for students to save \$25 so that they can buy themselves a special treat. Students play in teams of two or three players. Materials needed: 1 die and 1 coin (or two-sided counter) for each team. The banker on each team also needs paper and a pencil. The job of the banker is to write down only the money "saved" by each player and to keep a running total for each player. (The banker may also be a player.)

How to Play:

Players take turns rolling the die and then flipping the coin. The die is rolled first. The number on the die is the number of dollars the player has received. The player then flips the coin. If it is tails, it means the player has chosen to WITHDRAW money from the banks and SPEND it, and the banker does not record anything for that player. If the coin is flipped heads, it means the player has chosen to SAVE the money, and the banker adds the number of dollars to that player's account. When a player reaches a total of \$10 in his or her account a BONUS of \$1 is added to the total. When a player reaches a total of \$20 in his or her account a BONUS of \$2 is added to the total. The first player to SAVE \$25 wins the game.

2 Activity 2 will simulate the steady growth of money in a savings account contrasted with the risks of investing money in a business. In this game, the goal is for a student to grow





\$20 into \$50. Students play in teams of 2–4 players. Materials needed: 2 dice for each team. Each player also needs paper and a pencil to keep a running record of the growth of their money.

How to Play:

Each player writes \$20 on his or her paper. This amount is the player's beginning balance; the money the player has to save or invest. Players take turns. The player has a choice on each turn. The player may say that he or she is going to SAVE and automatically add \$4 to his or her balance. Or the player may choose to INVEST by rolling the dice. The number rolled is the number of dollars that is then added to the player's balance. **WARNING:** If the player chooses to INVEST and subsequently rolls a double, that amount must be **subtracted** from the player's balance. (This represents a loss by the company.)

The winner is the first player to reach \$50. If at any time a player reaches a balance of \$0, that player is automatically out of the game. (This could occur if a player rolls a series of doubles.)

Note: If the game is played with three or more players, every player should have the same number of turns. It is possible for a player to reach or exceed \$50 before every player has had his or her turn in the round. In this case, the player with the greatest balance after every player has finished the round is the winner.

After playing both games, ask students to compare the risks of investment with the growth of money in a savings account.

PART IV—Save It Or Charge It

Explain to students that sometimes people do not have enough money saved to make a large purchase such as buying a car or buying a house. Therefore, people will borrow money (a loan) from a bank or other type of loan company. These people agree to pay the money back with additional interest.

2 Explain that sometimes people don't have enough money to make smaller purchases like a television or clothes so people will use a credit card to make the purchase. Point out that a credit card is a loan that needs to be paid back with interest.



3 Show students the following examples to compare the advantages of saving compared with the disadvantages of charging using a credit card because interest earned on a savings account is much less than the interest paid on credit cards and other loans. (Note: Dollar values are not exact. All dollar values have been rounded for ease of comparison.)

A new television costs \$500.

If you save \$500 for four years, you will have about \$564.* (3% interest earned)

If you charge \$500 for a new television on a credit card and pay it back over four years, you will have paid approximately \$705. (18% interest paid)

A new computer costs \$2,000.

If you save \$2,000 for four years, you will have about \$2,255.* (3% interest earned)

If you charge \$2,000 for a new computer on a credit card and pay it back over four years, you will have paid approximately \$2,820. (18% interest paid)

*compounded monthly

Ask students to evaluate the advantages and disadvantages of making a purchase using credit. Ask them to identify situations in which using a credit card may be necessary.

Enrichment Activity: Have students explore the power of interest rates using online calculators such as <u>http://www.bankrate.com/</u> <u>calculators.aspx or www.themint.org/kids/</u> <u>compounding-calculator.html.</u>

PART V—Using Dollar Dilemmas Activity Sheet

The Dollar Dilemmas activity sheet can be used to follow up this lesson, or it can be used as a stand-alone component.

The objective of the worksheet is to introduce students to the concept of how their money can grow when placed into a savings or investment account.

Disclaimer: All dollar figures used within the worksheet are for illustrative purposes only and reflect only approximate relationships between principal and interest. These figures do not reflect actual interest rates



that are currently available. Rates used to develop the problems are based on interest rates that are compounded monthly; however, understanding of the concept of "compounded interest" is not necessary for students' completion of these problems.

Answer Key:

1.	A
2.	L
3.	0
4.	L
5.	R
6.	D

Riddle: DOLLAR



NAME:

STUDENT WORKSHEET 3

Dollar Dilemmastre

Directions: Solve each problem. Then unscramble the letters of the correct answers to find the answer to the riddle at the bottom of the page.

Emma Saver deposited \$75 she earned from collecting soda cans into her savings account. Her money earned \$5 in interest. What was the total that Emma had in her account?

M) \$70 **A)** \$80

S) \$105



Richie Money had an account balance of \$3,800. If he had earned \$700 in interest, how much did he originally deposit into his account?

R) \$4,500 **0)** \$3,100 **I)** \$700

Benjamin Frank Linn deposited
\$4,000 into his savings account from his kite business. After five years, his balance was \$4,900.
How much interest did Benjamin earn on his money?
U) \$42
N) \$8,900
L) \$900

John Waster spent \$350 on a pair of new shoelaces. If he had deposited the money in his savings account, it would have grown to \$390 in about two years. How much interest could John have earned?

R) \$40 **Y)** \$390 **E)** \$30

You deposited \$10 in your savings account every month for four years. All together you deposited \$480. However, your account balance with interest is \$540. How much interest did you earn?

U) \$50 **D)** \$60

E) \$1,020

Riddle: What kind of bills do kids like?

bills!