## Why Save?

## LESSON DESCRIPTION AND BACKGROUND

The students learn about saving and investing, and they consider the importance of setting short-term, medium-term, and long-term savings goals. They use math skills to solve problems and they play a game designed to emphasize the importance of setting goals and working toward a goal. Finally, they engage in a family activity that focuses on the opportunity cost of saving.

Lesson 10 is correlated with national standards for mathematics and economics, and with personal finance guidelines, as shown in Tables 1-3 in the introductory section of this publication.

## ECONOMIC AND PERSONAL FINANCE CONCEPTS

- Investing
- Long-term goals
- Medium-term goals
- Opportunity cost
- Saving
- Scarcity
- Short-term goals


## OBJECTIVES

At the end of this lesson, the student will be able to:

- Recognize the importance of setting goals.
- Define short-term, medium-term, and long-term goals.
- Use math to project savings goals.
- Identify the opportunity cost of saving.


## TIME REQUIRED

Two 45-minute class periods

## MATERIALS

- A transparency of Visual $\mathbf{1 0 . 1}$ and $\mathbf{1 0 . 2}$
- A copy of the Introduction to Theme 4 and Introduction and Vocabulary sections of Lesson 10 from the Student Workbook
- A copy of Activity $\mathbf{1 0 . 1}$ for each group of four students
- A copy for each student of Exercise 10.1 and 10.2 from the Student Workbook
- A copy for each student of Lesson 10 Assessment from the Student Workbook
- Scissors and a pair of dice for each group of four students
- Three 4 " $\times 6$ " index cards for each student
- Sticky notes or index cards


## ADDITIONAL RESOURCES

To download visuals, find related lessons, correlations to state standards, interactives, and more, visit http://fffl.councilforeconed.org/ 6-8/lesson10.

## PROCEDURE

1. Introduce the lesson's focus on saving and goal setting. Explain that the act of setting a goal helps people to think clearly about the steps that might be needed to reach that goal. When we state clearly what we want to do, ideas about how to do it often come into focus. Distribute a copy of the Introduction to Theme 4 and Introduction and Vocabulary sections of Lesson 10 from the Student Workbook to each student. Ask the students to read these passages as a way to introduce the ideas found in this lesson.
2. Pose a hypothetical goal for the students to consider-e.g., getting elected president of the school's student council. (Note: Not all schools have student councils. Please substitute a different goal if this goal is unsuitable for your school.) Ask: what steps would you take in a campaign for the student council presidency? (Discuss the students' responses briefly. Remind the students that some campaign activities take place months before the election, while others must be completed weeks or just days prior to the election. Continue the inquiry as described below.)
a. Divide the class into small groups. Allow about 10 minutes for each group to brainstorm ideas about "Things to Do to Prepare for an Election Campaign," recording each idea on a sticky note or index card (one idea per note).
b. On the board, draw five large circles, labeling them, from left to right, "Three months before the election," "One month before the election," "Two weeks before the election," "One week before the election," "One day before the election."
c. Invite the students to post their notes on the board in the appropriate circles.
d. Discuss the students' responses. Focus the discussion on the reasoning behind the proposed steps.
3. Explain that, like campaigning for an office, saving money in order to achieve a goal also requires planning.
a. Check briefly to make sure the students know what saving money means. (Putting money aside from current income so that it will be available for some use in the future-e.g., buying a car, paying college tuition, etc.)
b. Explain an important first step: When people decide to save money, they need to decide where they will put the money they save. It is possible to put one's savings into a coffee can or a desk drawer at home, but most people would prefer to deposit their savings in an account at a bank or another financial institu-
tion. Why might people prefer to deposit their savings in an account? (When people deposit savings in a bank account, their money earns interest. The money they save becomes a financial investment; it will grow; and the depositors will eventually have more dollars and cents than they originally deposited.)
c. Pause to clarify and emphasize the underlying reason for saving. Ask:
i. Why do people take the trouble to save? (Saving money positions people to do things in the future that they might otherwise not be able to do-to buy a car, make a down payment on a house, pay for a college education, make a charitable contribution, respond to an emergency without going broke, etc.)
ii. Are you saving money for a goal of your own right now? (Responses will vary.)
4. Display Visual 10. 1. By reference to the Visual, introduce the concepts of "short-term," "medium-term," and "long-term goals."
a. Go over the definitions. Note that the time spans used in the definitions are somewhat arbitrary, but they represent common-sense boundaries for these saving terms.
b. Ask the students to suggest goals (buying certain goods or services, for example) that might require short-, medium-, or long-term savings plans. (Answers might include saving money to attend a sporting event or to go to the movies [short-term goals]; saving money for an upcoming vacation [a mediumterm goal]; saving money to buy a car or pay for a college education [long-term goals].)
c. Suppose that the goal is to save $\$ 600$ to buy a new computer. Could this be a short-term goal for one saver and a long-term goal for another saver? Explain. (The amount that can be saved in any time period varies depending upon an individual's earnings and expenses. If Samantha earns a good salary and doesn't have many expenses, she might be able to save $\$ 600$ in a short time; if Albert
earns the minimum wage and has many expenses, he might need a long time to save \$600.)
5. Display Visual 10.2. Explain the relationship between short-term and long-term goals.

- Long-term goals are usually more difficult to reach than short-term goals. When a person tries to save money over, say, four years, the plan might be difficult to follow for many reasons. Emergencies might pop up, causing the saver to spend money he hadn't planned to spend. Or the saver might get a new idea about what it would be really important for him to do with his money now, rather than sticking to his savings plan. If the emergency creates an urgent need, or the new idea looks more attractive than the original savings goal, the goal may be abandoned in favor of the alternative. In economic terms, the "opportunity cost" of saving in these cases-not being able to cope with the emergency, not pursuing the new idea-might seem to be too high. (As necessary, review the definition of "opportunity cost" as the next-best alternative given up when a choice is made.)
- One way of coping with the difficulty of saving for long-term goals is to break them down by setting a sequence of short-term goals that will lead, eventually, to reaching the long-term goal. The one-step-at-a-time approach can give savers a feeling of accomplishment that motivates them to keep going.

6. Distribute a copy of Exercise $\mathbf{1 0 . 1}$ from the Student Workbook to each student. Go over the directions. Assign the students to read the three cases and answer the questions posed at the end of each case, working independently.
Discuss the students' answers.

## Answers to Exercise 10.1:

1. It will take Jose 25 weeks, or a little more than 6 months, to save enough for the bracelet. This is a medium-term goal. Explanation: Jose earns $\$ 43$ a week; he saves $\$ 18$ for college and spends $\$ 15$. That leaves $\$ 10$
every week to save for the bracelet. (\$43-\$18$\mathbf{\$ 1 5 = \$ 1 0 . ) ~ T h e ~ b r a c e l e t ~ c o s t s ~ \$ 2 5 0 . ~ \$ 2 5 0 / \$ 1 0 ~}$ $=25$ weeks to save. 25 weeks divided by approximately 4 weeks in a month equals 6.25 months. If Jose saves his money in an inter-est-bearing bank account, he will meet his goal earlier.
2. It will take Lauren just over 8 weeks to save for the saxophone. This is on the dividing line between a short- and medium-term goal. Explanation: Lauren saves $\$ 6$ of her allowance money for college. That leaves $\$ 26$ every week (\$20 from babysitting and $\$ 6$ from her allowance) to be saved for the saxophone. The saxophone costs $\$ 210 . \$ 210 / \$ 26=8.07$ weeks, approximately 2 months.
3. Darnell will not be able to save enough money for his short-term goal. He earns $\$ 90$ per week, saves $\$ 24$, gives $\$ 5$ to charity, and spends $\$ 10$. This means he has $\$ 51$ per week (\$90-\$24-\$5-\$10 = \$51) for the golf lessons. In six weeks Darnell will have only $\$ 306$ (\$51 x 6). He needs $\$ 54$ more for the golf lessons. Answers will vary as to how Darnell could change his savings or spending plan in order to meet his goal.
4. Review the problems in Exercise 10.1, asking the students to identify, in each case, the opportunity cost of saving. (When José, Lauren, and Darnell decided to save for the future, they gave up the chance to spend a certain amount of money in the present.)
5. Introduce Rolling for a Goal, an activity designed to reinforce concepts related to savings goals.
a. Before starting the activity, copy enough sets of game cards from Activity $\mathbf{1 0 . 1}$ to give each group of four a full set of cards. Divide the class into groups of four. Give a set of game cards and two dice to each group.
b. Give each student a copy of Exercise $\mathbf{1 0 . 2}$ from the Student Workbook. Go over the directions; as necessary, help the students get started. Then have the students play the game.
c. When the students have finished the game, engage them in a discussion of differences among short-, medium-, and long-term savings goals. (The students should recognize that achieving short-, medium-, or long-term goals depends on the amount of money saved each month and the number of months you will be able to save.)
d. Ask the students if leaving a savings plan to chance (here, the roll of the dice) is a good idea. (The students should recognize that many of the goals were not met when they did not save enough each month, or did not save long enough-factors that were determined by the roll of the dice.)

## CLOSURE

Distribute three $4^{\prime \prime} \times 6^{\prime \prime}$ index cards to each student.
Have the students make up three story problems (similar to the problems in Exercise 10.1) about short-, medium-, and long-term savings goals. The students should write one problem on each card, with the answers on the back.
When the students have completed the task, put the cards in a box so the students can challenge one another.

## ASSESSMENT

Distribute a copy of Lesson 10 Assessment from the Student Workbook to each student. Assign them to do the assessment, working independently. See Visual $\mathbf{1 0 . 3}$ for an answer key to the assessment.

## EXTENSION

Ask students to recall an item they wanted to buy in the Rolling for a Goal activity. Imagine that the outcome for each of them was that the item was a long-term goal. Explain that longterm goals can be converted to medium-term goals under certain conditions. An increase in income can change long-term goals into medium-term goals and medium-term goals
into short-term goals. Another way to reduce the time it takes to save for a goal is to give up other goods and services and save more money toward the goal. A third method is to seek a lower price for the good or service that is the goal. This could include finding the item on sale, buying last year's model, or finding a model that has fewer features.
Instruct students to use the Internet to identify similar items at lower prices. For example, they can visit websites such as Travelocity or Priceline for Disney vacations or visit eBay for a used mountain bike.

## Short-term, Medium-term, and Long-term Goals

Short-term goals can be achieved in fewer than two months.

Medium-term goals may take from two months to three years to achieve.

Long-term goals require three or more years to achieve.

Long-term goals may be built upon short-term goals.

## What Is the Relationship Between Long-term and Short-term Goals?

There is a relationship between long-term goals and shortterm goals. Often, achieving a long-term goal requires reaching a set of short-term goals.

For example, in order to buy a $\$ 960$ mountain bike in four years, Miranda needs to save $\$ 240$ in each of the next four years, or $\$ 20$ each month. The short-term savings target amounts to less than $\$ 1$ per day.

Breaking long-term goals into medium- and short-term goals helps to make them seem achievable.

## Lesson 10 Assessment: Answer Key

SHORT-, MEDIUM-, AND LONG-TERM GOALS

Use Lesson 10 Assessment to determine whether the students have mastered the concepts in this lesson. Answers are provided in the chart below.

| Person | Amount to <br> Be Saved | Amount Saved <br> Each Month | How Many <br> Months | How Many <br> Years | Short- Medium- or <br> Long-term |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Abby | $\$ 780.00$ | $\$ 20.00$ | 39 | 3.25 | L |
| Ben | $\$ 25.00$ | $\$ 15.00$ | 1.67 | .14 | S |
| Cherise | $\$ 700.00$ | $\$ 35.00$ | 20 | 1.67 | $\mathbf{M}$ |
| Danuka | $\$ 800.00$ | $\$ 70.00$ | 11.43 | .95 | $\mathbf{M}$ |
| Emilio | $\$ 90.00$ | $\$ 50.00$ | 1.8 | .15 | S |
| Festis | $\$ 2,900.00$ | $\$ 75.00$ | 38.67 | 3.22 | L |

(It will take Cherise 20 months to reach her savings goal of $\$ 700$.

The opportunity cost of saving for the future is the chance to spend money in the present. Accept any reasonable answer for each month's opportunity cost.

Examples: January opportunity cost = noisemakers and party hats for New Year's Party; February opportunity cost = red sweater for Valentine's Day; June opportunity cost = beverages and snacks for end-of-the-school-year picnic; July opportunity cost = flags, hot dogs, and apple pie for July Fourth celebration; September opportunity cost = pens, rulers and notebooks for back-to-school; October opportunity cost = pumpkins and costume for Halloween party; December opportunity cost = woolen hat and gloves for ski trip.)

## Game Cards: Rolling for a Goal

These are the saving goals for Exercise 10.2, Rolling for a Goal.
Photocopy this page and cut out the cards to make one set of cards for each group of four students. Shuffle the cards and place them face down in a pile in front of the players in each group.

| Mountain bike <br> $\$ 1,099$ | Family trip to Disney World <br> $\$ 3,200$ |
| :--- | :--- |
| New computer system <br> $\$ 1,500$ | Clothing shopping spree <br> $\$ 800$ |
| New mp3 player and docking station <br> $\$ 500$ | Annual family membership in health <br> club $\$ 1,600$ |
| One casual clothing outfit <br> $\$ 180$ | Smart Phone and annual calling costs <br> $\$ 1,200$ |
| Inline skates <br> $\$ 270$ | Big screen TV for your bedroom <br> $\$ 2,300$ |
| Album downloads for one year <br> $\$ 240$ | Saddle and tack for horse <br> $\$ 1,700$ |
| New furniture for your room <br> $\$ 2,500$ | Two tickets to a professional basketball <br> game $\$ 244$ |
| Drum set <br> $\$ 2,700$ | Aquarium and fish <br> $\$ 200$ |
| Spending money for class trip <br> $\$ 300$ | Leather jacket <br> $\$ 700$ |
| Snowboard and boots <br> $\$ 500$ | Dance lessons for one year <br> $\$ 630$ |
| Tennis lessons from a pro for one year <br> $\$ 2,600$ |  |
| Airfare to visit grandparents <br> $\$ 1,000$ | and |

