



Smart About Spending

Teacher's Guide

MDHETM
Missouri Department of Higher Education

*Building Missouri's future...
by degree[®]*

Smart decisions start with smart resources

Financial literacy is one of the most important lessons your students will learn. With so much to consider and their future at stake, students need financial tools they can use throughout their lifetime. Use these lesson plans, worksheets, and assessments to guide your students through topics such as income, money management, spending, credit, saving and investing.

How to use this guide

In 2002 the Missouri Department of Elementary and Secondary Education (DESE) was charged with reviewing results reported in “Towards Economic and Financial Literacy: A Final Report (The Study).” This report suggested:

- Integration of grade-appropriate principles of economics and personal finance from K–12
- Integration of testing on appropriate areas of economics and personal finance into Measures of Academic Progress testing
- Content for a capstone high school course in which a passing grade shall be achieved
- Establishing appropriate undergraduate preparation requirements for teacher certification

In response to this report, a personal finance advisory committee was formed. DESE accepted recommendations of “The Study,” and the committee began to work on the Missouri Personal Finance Standards. The four standards adopted by the committee included: income, money management, spending and credit, and saving and investing.

The legislation that put all of this into motion began with HB1973, which was first introduced in the Missouri House on Feb. 19, 2002 by Rep. John Bowman, D-St. Louis County. HB1973 was truly agreed and finally passed on May 5, 2002. HCR24 was introduced by Rep. Bowman and adopted on May 13, 2005.

As a result, the senior class of 2010 became the first to graduate with the personal finance requirement.

To offer guidance to those educational professionals charged with teaching the personal finance course, the Missouri Department of Higher Education created this resource to be used in conjunction with the *Smart About Spending Student Workbook*, which can be ordered free of charge for Missouri students. Lesson plans and worksheets have been created so personal finance teachers can assist their students in making sound financial decisions throughout high school and beyond.

Questions regarding both *Smart About Spending* publications may be directed to Marilyn Landrum (marilyn.landrum@dhe.mo.gov) or Sarah Schedler (sarah.schedler@dhe.mo.gov). Information pertaining to Missouri’s high school personal finance course is located on DESE’s website (dese.mo.gov/college-career-readiness/assessment/personal-finance).

Table of Contents

Smart About Spending Teacher’s Guide

Letter of Introduction _____ 5

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Commissioner of Elementary and Secondary Education

Section 1: Income

Activity 1.1 _____ 8

Activity 1.2 _____ 11

Section 2: Money Management

Activity 2.1 _____ 16

Activity 2.2 _____ 17

Activity 2.3 _____ 18

Section 3: Spending and Credit

Activity 3.1 _____ 24

Activity 3.2 _____ 26

Activity 3.3 _____ 27

Section 4: Saving and Investing

Activity 4.1 _____ 32

Activity 4.2 _____ 36

Activity 4.3 _____ 38

Important Terms and Resources

Terms students should know _____ 40

Resources _____ 44

Field trip opportunities and suggested guest speakers _____ 45



Dear Personal Finance Teachers:

Sound financial skills are critical to a good quality of life. Learning about income, spending, credit, saving, and investing will help prepare students for the future.

Today's classrooms have evolved from a primary emphasis on traditional subjects to a focus on equipping students with the knowledge and skills they need to make informed decisions throughout their lives. Personal finance education has been a part of that evolution. From paying for college to planning for retirement, financial choices are among the most important decisions individuals make.

Recognizing the importance of money management, the Missouri Legislature approved legislation in 2006 that requires Missouri high school students to take a half-credit hour course in personal finance. A 2016 report from the U.S. Treasury Department shows that individuals graduating from high schools that require personal finance education continue to have higher savings rates and net worth as a percentage of their income than high school graduates in states where financial education is not mandated.

In August of 2016, the Missouri State Board of Education authorized the review and possible revision of the personal finance learning expectations for high school students. The Personal Finance Workgroup has been organized according to state statute, and the work has begun.

The goal of the "Smart About Spending" teacher's guide is to increase the number of students who are financially savvy and make wise decisions about higher education, careers, and life in general. In this guide, you will find activities, links to helpful resources, topics for group discussion, and suggestions for field trips and guest speakers. The worksheets and quizzes are designed to help sharpen your students' skills and assess their progress. An ever-changing global economy has made financial literacy an increasingly important part of K-12 education. Now more than ever, students must understand that financial decisions will have a major impact on their lives.

As you prepare your students to navigate the world of student loans, living on a budget, dealing with credit, and saving money, you are helping them build a bridge between high school, higher education, and beyond.

The success of our state in the future depends on the success of our students now. Thank you for using this guide and for all you do to help your students succeed.

Sincerely,

Zora Mulligan
Commissioner of Higher Education

Margie Vandeven
Commissioner of Education

1

Income

~~~~~  
**Missouri Personal Finance Competencies covered in this section:**  
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Identify components and sources of income.

Analyze how career choice, education, skills, and economic conditions affect income and goal attainment.

Relate taxes, government transfer payments, and employee benefits to disposable income.

Income

ACTIVITY 1.1

Analyze how career choice, education, skills, and economic conditions affect income and goal attainment.

Purpose and description

This lesson is designed to help students realize the economic impact career choice will have on their lives as Missouri citizens. Students will also explore what training or education is needed to accomplish their career and personal goals.

Objectives

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

1. Locate their chosen profession's regional annual wage
2. Determine the cost, education and/or training necessary for their chosen profession
3. Determine if the starting salary will be adequate to cover their student loan payment
4. Evaluate how much income can be acquired within 25 years of employment
5. Explore various career and salary options

Required resources

Each student should have a copy of the *Smart About Spending Student Workbook*.

1. Worksheet 1.1.1
2. Computer lab with Internet access
3. Top 30 Employing Occupations in Missouri chart, located in the *Smart About Spending Student Workbook*
4. Missouri's Top Job Grade graphs, located in the *Smart About Spending Student Workbook*
5. Missouri Department of Higher Education's *The Missouri Source*

Required class time

Three (60 minutes) class periods
180 minutes total

Assignment

Section 1: Income
Worksheet 1.1.1

Procedure

Day 1

1. Ask students to read their *Smart About Spending Student Workbook*, Section 1: Income.
2. Ask students to review Missouri's Top Job Grade graphs.
3. Compare Missouri's Top Job Grade A, B and C graphs with the Top 30 Employing Occupations in Missouri chart.
4. Break the classroom up into groups of three or four students. Instruct each group to discuss the following questions:
 - a. What does this say about the job market?
 - b. Are the salaries higher or lower than you expected?
 - c. Does this have an impact on your career choice?
 - d. Why do you think the top 30 employing occupations exist in the order they do?
 - e. What impact, if any, does this have on your plans for a post-secondary education and the school you will attend?
 - f. What impact, if any, does this have on your plans to move out on your own?
5. As a class, share what students discussed in groups.

Income

ACTIVITY 1.1

Day 2

6. Ask students to select a profession or career.
7. Direct students to Worksheet 1.1.1. Inform students that it will be used over a two-day period to complete activities in this lesson.
8. Go to the computer lab.
9. Log on to missourieconomy.org/OesWage. Have students research their profession's wage based on the area where they live. Advise students to enter the annual wage for their chosen profession on the worksheet.
10. Have students research what education or training is needed for their chosen profession. Suggest that students log on to bls.gov/search/ooh.htm or interview professionals they may know to complete this task.
11. Have students research how much education or training may cost at a variety of schools (e.g., 2-year, 4-year, public, and private, etc.). Have students search the schools' websites for information regarding annual tuition and fees. Refer students to the Missouri Department of Higher Education's Program Inventory (collegesearch.mo.gov).
12. To research paying for a post-secondary education, refer students to *The Missouri Source* or the Missouri Department of Higher Education's website (dhe.mo.gov).
13. Have students complete all exercises on the worksheet except for the "Personal reflection" portion.

Day 3

14. Group students into similar professions. Advise students to compare and contrast their findings (e.g., costs related to different types of schools). The group will then present to the class the certificate or degree required, length of program, educational or training expenses, annual salary, and how much they will earn after working in the field 25 years. Groups should also share what exact education or training they will undergo, the names of schools they plan to attend, and why they selected those particular schools.

Assessment

1. Ask each student to complete the "Personal reflection" portion of this activity.
2. File worksheets behind Section 1: Income, in the *Smart About Spending Student Workbook*.

Income

ANSWER KEY 1.1.1

Name: _____ Date: _____

1. What is your desired career or profession? _____

2. What is your annual wage? _____
Visit missourieconomy.org/OesWage.

3. What additional education or training is needed for your desired career or profession? Visit bls.gov/k12/content/students/careers/career-exploration.htm, or you may interview someone who is currently employed in the field.

4. How much will the education or training cost? Research what education and training will cost at a variety of schools. Refer to the Missouri Department of Higher Education's program inventory (collegesearch.mo.gov).
\$ _____ (annual cost) x _____ (number of years you will attend) = \$ _____ (total)
\$ _____ (annual cost) x _____ (number of years you will attend) = \$ _____ (total)
\$ _____ (annual cost) x _____ (number of years you will attend) = \$ _____ (total)

5. After applying for scholarships and grants, you find you are still falling short of enough to pay for your education. The maximum amounts of student loans for dependent students are:
\$5,500 — Freshman (\$3,500 subsidized/\$2,000 unsubsidized)
\$6,500 — Sophomore (\$4,500 subsidized/\$2,000 unsubsidized)
\$7,500 — Junior (\$5,500 subsidized/\$2,000 unsubsidized)
\$7,500 — Senior (\$5,500 subsidized/\$2,000 unsubsidized)

Use the Student Loan Repayment Calculator at mappingyourfuture.org/paying/standardcalculator.cfm to complete the following to see what your total debt would be if you borrow the maximum amount each year you are in school.

Number of Monthly Payments: 120 Simple Interest Rate: 6.8%

- A. Principal amount of loan: **\$27,000**
- B. Your total interest costs: **\$10,286.02**
- C. Total cost of education or training: **\$37,286.02**
- D. Monthly payment: **\$310.71**
- E. Minimum annual salary to handle these payments: **\$46,607**

Will the salary from your chosen profession be enough to cover this payment? Answers will vary depending on their chosen profession

6. Annual wage x 25 = \$ _____ — Total cost \$ _____
= Total lifetime salary \$ _____

Income

ACTIVITY 1.2

Relate taxes, government transfer payments, and employee benefits to disposable income.

Purpose and description

The purpose of this lesson is to educate students on the most common paycheck deductions.

Objectives

At the end of this lesson, students will:

1. Know the definition of disposable income
2. Know the most common paycheck deductions and taxes
3. Understand the reason for common paycheck deductions

Required resources

Each student should have a copy of the *Smart About Spending Student Workbook*.

1. Worksheet 1.2.1
2. Assessment 1.2.2
3. Computer lab with Internet access

Required class time

Two (60 minutes) class periods
120 minutes total

Assignment

Section 1: Income
Worksheet 1.2.1

Procedure

Day 1

1. Ask students to review their *Smart About Spending Student Workbook*, Section 1: Income.
2. Go to the computer lab.
3. Visit mappingyourfuture.org/Money/income.cfm to complete Worksheet 1.2.1.

Day 2

4. Have students trade their completed worksheet with a classmate and discuss the correct answers as a class.
5. Collect graded worksheets.

Assessment

1. Direct students to Assessment 1.2.2 and have them complete it.
2. Grade the assessment and have students file it along with the worksheet behind Section 1: Income, in the *Smart About Spending Student Workbook*.

Notes to instructor

Encourage students with jobs to bring in their pay stubs. Break the classroom up into groups and have students identify the following items and amounts:

- a. Gross pay
- b. Net pay
- c. Federal Insurance Contributions Act Tax (FICA)
- d. Current earnings
- e. Year-to-date earnings
- f. Federal income tax
- g. Missouri income tax
- h. Pay rate

Income

ANSWER KEY
1.2.1

Name: _____ Date: _____

DIRECTIONS: Answer the following questions below using the pay stub.

Central Grocery Store #122		Statement of Earnings and Deductions				
Employee Ida Student			Check Number 1234567			
SSN *****1234	Period End Date 09/30/2017	Pay Rate 8.00	Check Date 10/02/2017	Net Pay 105.85		
Current Earnings 128.00	YTD Earnings 1,536.00	Current Deductions 22.15				
Pay Category	Rate	Hours	Amount	Deduction Category	Amount	YTD Amount
Regular Pay	8.00	16	128.00	Federal Income Tax	10.50	126.00
Vacation		0	0	Missouri Income Tax	3.71	44.52
				FICA Tax	7.94	95.28

Questions? Contact Human Resources at 573-555-8000.

1. Explain the difference between gross pay and net pay. *Gross pay is your pay rate multiplied by your hours worked. Net pay is the amount of money you actually receive after deductions.*


2. How much is Ida's current gross pay? \$ 128
3. How much is Ida's current net pay? \$ 105.85
4. FICA tax is also known as Social Security tax.
5. How much FICA has Ida paid this year so far? \$ 95.28
6. Name three other possible deductions:
Retirement contributions; Insurance; Cafeteria or FLEX plan;
Wage garnishment; Any other agreed automatic withholdings
7. How much in deductions did Ida pay this month? \$ 22.15
8. Tax deductions are calculated based on the amount earned and the number of exemptions you claim.

Income

ASSESSMENT KEY
1.2.2

Name: _____ Date: _____

DIRECTIONS: Identify the values for the items on the right side of the page using the pay stub below.

State of Missouri Office of Administration PO Box 809 Jefferson City, Missouri 65102			
Name: JOE STUDENT		Check Date: 12/15/2017	
Address: 100 MAIN STREET ANYWHERE, MO 61111		Payroll Period: 11/16/2017 - 11/30/2017	
		Check Net Amount: \$1,147.55	
Wages	Amount	YTD Amount	
GROSS WAGES	\$1,707.00	\$39,261.00	
FEDERAL/STATE TAXABLE WAGE	\$1,428.89	\$32,864.47	
SOCIAL SECURITY/MEDICARE WAGE	\$1,463.89	\$33,669.47	
Pay	Rate	Hours	Amount
REGULAR PAY	\$1,707.00	78:40	\$1,549.43
STATE COMP USAGE PAY	\$1,707.00	8:00	\$157.57
Total		86:40	\$1,707.00
Deductions	Amount	YTD Amount	
CAFETERIA ADMINISTRATION FEE	\$1.25	\$28.75	
CAFETERIA PLN-FLEXIBLE MEDICAL	\$164.16	\$3,775.68	
FEDERAL TAX WITHHOLDING	\$160.37	\$3,688.51	
MCHCP DENTAL - CP	\$24.15	\$555.45	
MCHCP HEALTH - CP	\$50.00	\$1,150.00	
MCHCP VISION - CP	\$4.80	\$110.40	
MEDICARE TX W/H EMPLOYEE SHARE	\$21.23	\$488.21	
MO STATE DEFERRED COMP PLAN	\$35.00	\$805.00	
MO STATE EMP CHARITABLE CAMPAI	\$5.00	\$115.00	
SOCIAL SECURITY TAX W/H -EE	\$61.49	\$1,414.12	
STATE TAX WITHHOLDING	\$32.00	\$736.00	
Total	\$559.45	\$12,867.12	
Employer Contributions	Amount	YTD Amount	
LIFE INSURANCE FRINGE PAYMNT	\$7.60	\$174.80	
LONG TERM DISABILITY FRINGE	\$8.45	\$194.35	
MCHCP HEALTH FRINGE PAYMENT	\$328.00	\$7,736.00	
MEDICARE FRINGE PAYMENT	\$21.23	\$488.21	
MOSERS RETIREMENT PLAN FRNG PY	\$238.47	\$5,449.32	
RETIREE HEALTH FRINGE	\$68.79	\$1,633.41	
SOCIAL SECURITY TAX W/H -ER	\$90.76	\$2,087.51	
Total	\$763.30	\$17,763.60	

1. Current gross wages amount:
\$ 1,707.00
2. Current net pay amount:
\$ 1,147.55
3. Current Medicare Tax amount:
\$ 21.23
4. Year-to-date (YTD) gross wages:
\$ 39,261.00
5. Current federal income tax amount:
\$ 160.37
6. Current state income tax amount:
\$ 32.00
7. Current FICA (Social Security) amount:
\$ 61.49

2

Money Management

Missouri Personal Finance Competencies covered in this section:

Explain how limited personal financial resources affect the choices people make.

Interpret the opportunity costs of financial decisions.

Evaluate the consequences of personal financial decisions.

Apply a decision-making process to personal financial choices.

Summarize how inflation affects spending and saving decisions.

Evaluate how insurance (e.g., auto, home, life, medical and long-term health) and other risk-management strategies protect against financial loss.

Design a financial plan (budget) for earning, spending, saving, and investing.

Demonstrate how to use the services available from financial institutions.

Analyze the role of the Federal Reserve in controlling the money supply.

2 Money Management

ACTIVITY 2.1

Design a financial plan (budget) for earning, spending, saving, and investing.

Purpose and description

The purpose of this lesson is to learn the basics of living on a budget.

Objectives

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

1. Track their expenses and live within their means

Required resources

Each student should have a copy of the *Smart About Spending Student Workbook*.

1. Worksheet 2.1.1
2. Worksheet 2.1.2
3. Computer lab with Internet access

Required class time

One (60 minutes) class period

Assignment

Section 2: Money Management
Worksheet 2.1.2

Procedure

Day 1

1. Ask students to read their *Smart About Spending Student Workbook*, Section 2: Money Management.
2. Assign each student an annual salary.
3. Ask students to determine their monthly income, both gross and net amounts.
4. Direct students to Worksheet 2.1.1, showing high, middle and low monthly expenses (e.g., rent/house payment, utilities, phone, Internet, cable, car payment, entertainment, credit card payments, student loan payments, etc.).
5. Ask students to create a monthly budget using Worksheet 2.1.2 with the assigned salary and choosing from the high, middle or low monthly expenses.
6. As a class, discuss who was able to live within their means.
7. Go to the computer lab.
8. Have students use Reality Check in Missouri Connections to determine what lifestyle they can afford. (missouriconnections.org)

Assessment

1. Review and discuss worksheets. Ask students what lessons they learned about income and expenses. Look for students to state these answers: “live within my means” and “cannot have more expenses than my income.”
2. File behind Section 2: Money Management, in the *Smart About Spending Student Workbook*.

Notes to instructor

If your school participates in Missouri Connections (missouriconnections.org), have students login using their username and password, otherwise login as a guest.

2 Money Management

ACTIVITY 2.2

Explain how limited personal financial resources affect the choices people make.

Interpret the opportunity costs of financial decisions.

Evaluate the consequences of personal financial decisions.

Purpose and description

The purpose of this lesson is to help students understand the concept of opportunity cost and the consequences associated with spending choices they make.

Objectives

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

1. Clearly explain the concept of opportunity cost
2. Articulate the future impact of today’s financial choices
3. Distinguish between “needs” and “wants”

Required resources

Each student should have a copy of the *Smart About Spending Student Workbook*.

1. Worksheet 2.2.1
2. Worksheet 2.2.2
3. Worksheet 2.2.3
4. Definitions for “needs” and “wants,” located in the “Terms you should know” section

Required Class Time

Two (60 minutes) class periods
120 minutes total

Assignment

Section 2: Money Management
Worksheet 2.2.3

Procedure

Day 1

1. Ask students to review their *Smart About Spending Student Workbook*, Section 2: Money Management.
2. Direct students to Worksheet 2.2.1 and review instructions with the class.
3. Advise students to complete the worksheet individually.
4. As a class, discuss some of the choices students made when completing the worksheet. Inquire about individual opportunity costs as a result of these decisions.

Day 2

5. Direct students to Worksheet 2.2.2 and review instructions with the class.
6. Advise students to complete the worksheet individually.
7. As a class, discuss some of the choices students made when completing the worksheet. Inquire about individual opportunity costs as a result of these decisions.

Assessment

1. Ask students to complete and turn in Worksheet 2.2.3.
2. File the worksheets behind Section 2: Money Management, in the *Smart About Spending Student Workbook*.

2 Money Management

ACTIVITY 2.3

Evaluate how insurance (e.g., auto, home, life, medical and long-term health) and other risk-management strategies protect against financial loss.

Purpose and description

The purpose of this lesson is to give students a general understanding of the various types of insurance currently relevant to them. These include: auto insurance, homeowners/renters insurance and health insurance.

Objectives

At the end of this lesson, students will:

1. Have a general knowledge of relevant insurance types
2. Be able to find resources on where to obtain insurance

Required resources

Each student should have a copy of the *Smart About Spending Student Workbook*.

1. Worksheet 2.3.1
2. Worksheet 2.3.2
3. Computer lab with Internet access
4. Two insurance agents (guest speakers for class)

Required class time

Four (60 minutes) class periods
240 minutes total

Assignment

Section 2: Money Management
Worksheet 2.3.1
Worksheet 2.3.2

Procedure

Day 1

1. Show these videos during class to start the discussion about insurance:
 - a. scholastic.com/nextgeneration/videos_student.htm
 - b. [youtube.com/watch?v=UD4CS1tiQMY](https://www.youtube.com/watch?v=UD4CS1tiQMY)
2. Break the students into groups and assign each group one of the insurance types: auto, homeowners/renters or health.
3. Ask students to review their *Smart About Spending Student Workbook*, Section 2: Money Management.
4. Direct students to Worksheet 2.3.1.
5. Go to the computer lab.

6. Ask each group to watch the video(s) for their assigned insurance type as indicated on the worksheet. As students view the videos, have them complete the appropriate sections of the worksheet.
7. Grade the worksheet before proceeding to Day 2 procedures.

Day 2

8. Give each group a few minutes to review completed worksheet.
9. Have each group give a brief presentation on what they learned about their assigned insurance type. Since insurance can be a dry subject, encourage creative presentations, like a skit or video.
10. Encourage students to take notes during the group presentations, and complete the remaining unanswered questions on the worksheet.

Day 3

11. Have guest insurance agents join the class.
12. Direct students to Worksheet 2.3.2.
13. Have guest speakers give an overview of the benefits of having insurance.
14. Encourage students to present the questions on the worksheet to guest speakers.
15. Have students turn in both completed worksheets.

Day 4: Assessment

1. Ensure students completed all parts of the worksheets, not just the group they were assigned.
2. Have students write a short essay relating how they will use the information learned from this activity and the guest speakers.
3. File the worksheets behind Section 2: Money Management, in the *Smart About Spending Student Workbook*.

Notes to instructor

Insurance policies can be difficult to comprehend. It is of critical importance that students have a basic understanding of insurance and, if they do not, are at least able to find the resources they need.

2 Money Management

ANSWER KEY 2.3.1

Names of group members: _____ Date: _____

DIRECTIONS: Check the type of insurance your group will be investigating and watch the corresponding video to answer the questions.

Homeowners/Renters Auto Health

Homeowners/Renter's insurance // [youtube.com/watch?v=2hSSoCti1KI](https://www.youtube.com/watch?v=2hSSoCti1KI)

1. If you are renting an apartment and there is a fire, what will the landlord's insurance cover? The structure only
2. What does renter's insurance cover? Your stuff you keep in your home
3. What is the average cost of renter's insurance? \$20 per month
4. The average person has \$ 20,000 worth of stuff.
5. Will renter's insurance cover all of your possessions? Only up to your policy limit

Auto insurance // [youtube.com/watch?v=eMtmbyl-ZgU](https://www.youtube.com/watch?v=eMtmbyl-ZgU) and [youtube.com/watch?v=q35RzY8qtZg](https://www.youtube.com/watch?v=q35RzY8qtZg)

1. List the four different types of auto insurance coverages and explain each one. Liability – pays for any injuries to others and their property damage for which you are responsible; Collision/Comprehensive – pays for physical damage to your vehicle; Medical Payments – pays for medical expenses you or your passengers sustain in an accident; Uninsured/Underinsured Motorist – pays for injuries and damages caused by persons with no insurance or with insurance limits too low to pay for your injuries
2. Which type of auto insurance is required in Missouri and what is the minimum coverage? Liability; 25/50/10 (discuss what these numbers mean: \$25,000 for one person's injuries, \$50,000 for total injuries, \$10,000 for property damage)
3. What do you do if you have an accident? Call 911 and exchange insurance information
Other answers may include: call your parents; call your insurance company; take photos

Health insurance // [youtube.com/watch?v=DBTmNm8D-84](https://www.youtube.com/watch?v=DBTmNm8D-84)

1. What is a deductible? The amount you pay before your insurance pays
2. What is the difference between in-network and out-of-network? In-network describes the doctors and hospitals covered by your insurance plan. Out-of-network describes doctors and hospitals not in your insurance plan that may or may not be covered by your insurance plan, and at a lesser rate – you may have to pay more to see an out-of-network doctor.
3. What does co-insurance or co-payment mean? The amount you pay after your deductible is met and before your insurance pays.
4. Describe the three stages of health insurance? Stage 1: You pay for everything until you meet your deductible; Stage 2: You pay a percentage and your insurance company pays a percentage of the cost; Stage 3: You meet your out-of-pocket maximum and insurance pays for everything

Preparing for the guest speaker // Use the back of your worksheet to:

- Take notes from the group presentations and videos.
- Write a question you would like to ask the insurance agents when they visit your classroom. (Encourage students to think of a question that pertains to students their age.)

Analyze the role of the Federal Reserve in controlling the money supply.

Purpose and description

The purpose of this lesson is to educate students about the Federal Reserve and the role it plays in their lives.

Objectives

At the end of this lesson, students will:

1. Have a general understanding of the Federal Reserve system and its purpose
2. Know the locations of Missouri’s Federal Reserve Banks and the areas they serve
3. Understand the role the Federal Reserve plays in the United States and in their lives

Required resources

Each student should have a copy of the *Smart About Spending Student Workbook*.

1. Lesson plans from kc.frb.org/publicat/education/teachingresources/Lessonplangr9-12.pdf (Federal Reserve Bank of Kansas City Money Museum Tour)*
2. Worksheet 2.4.1**

Required class time

Two (60 minutes) class periods
120 minutes total

Assignment

Section 2: Money Management
Worksheet 2.4.1

Procedure

Day 1

1. Ask students to review their *Smart About Spending Student Workbook*, Section 2: Money Management.
2. Follow the “Procedure” from the Money Museum Tour lesson.
3. Divide the class into small groups and direct them to Worksheet 2.4.1.

Day 2: Assessment

1. Use prepared questions from the Money Museum Tour lesson as a review of the Federal Reserve Bank.
2. File the worksheet behind Section 2: Money Management, in the *Smart About Spending Student Workbook*.

Notes to instructor

1. *Instructors should use their own discretion as to which lessons are used from the Federal Reserve’s Money Museum Tour lesson plans.
2. **Please note, Worksheet 2.4.1 of this guide is taken directly from the Money Museum Tour lesson, “Closure” section (pages 6–7).
3. As a possible field trip, consider the Kansas City Federal Reserve Bank. Free tours of the Money Museum are provided on a daily basis. For additional information, visit kansascityfed.org/moneymuseum.
4. You may also be interested in the St. Louis Federal Reserve Bank’s Inside the Economy museum (stlouisfed.org/inside-the-economy-museum/educators).

Name: _____ Date: _____

1. What makes up the money supply in the United States economy? *Along with checking account balances, the money supply is made up of currency and coin in circulation. This total is referred to as M1 funds.*

2. Explain how the money supply can increase and decrease. *When banks loan money to people and businesses, the overall money supply increases because there is more money in circulation. When these loans are paid back to the bank, the money supply decreases because there is less money in circulation. The Federal Reserve helps control the overall growth of the money supply.*

3. Why do banks have reserve requirements? *Banks have reserve requirements to assure depositors that there will be enough money on hand to meet their withdrawal needs.*

4. Describe how the money multiplier effect can create additional money. *After a deposit is made, the depositor has that amount available for spending in his account. The bank will then keep the reserve requirement (currently 10% from that deposit) and may loan the balance to another customer. This customer can deposit the balance in her account and use it for spending purposes, even though the original depositor still has access to the full amount of his deposit. Additional money has been created from the original deposit.*

5. Why was the Federal Reserve Bank established? *The Federal Reserve was established in 1913 by Congress to counteract banking panics and stabilize the money supply on a national level.*

6. Explain the three basic functions of the Federal Reserve Bank. *The three functions of the Federal Reserve Bank include: implementing monetary policy, which are actions that change the money supply in order to influence our country’s economy; regulating and supervising banks, which includes making sure banks do their business safely and properly; and operating the nation’s payments system, which consists of supplying banks with currency and coin, and processing checks, credit and electronic payments throughout the country.*

3

Spending and Credit

Missouri Personal Finance Competencies covered in this section:

Compare the benefits and costs of alternatives in spending decisions.

Evaluate information about products and services.

Compare the advantages and disadvantages of different payment methods.

Analyze the benefits and cost of consumer credit.

Compare sources of consumer credit (e.g., credit cards, consumer loans, auto loans, student loans).

Evaluate the terms and conditions of credit cards and consumer loans.

Evaluate factors that affect creditworthiness.

Explain the purpose and components of credit records.

Demonstrate awareness of consumer protection and information (e.g., identity theft, phishing, scams).

Research ways to avoid or correct credit problems.

Describe the rights and responsibilities of buyers and sellers under consumer protection laws.

3 Spending and Credit

ACTIVITY 3.1

Compare the benefits and costs of alternatives in spending decisions.

Purpose and description

The purpose of this lesson is to learn the basics of establishing and maintaining credit.

Objectives

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

1. Read a credit card statement
2. Take the appropriate steps if they find themselves in financial trouble

Required resources

Each student should have a copy of the *Smart About Spending Student Workbook*.

1. Assessment 3.1.1
2. Computer lab with Internet access

Required class time

Three (60 minutes) class periods
180 minutes total

Assignment

Section 3: Spending and Credit

Procedure

Day 1

1. Provide a sample of a credit card statement (aie.org/managing-your-money/credit-cards/reading-a-credit-card-statement.cfm).
2. Using the sample credit card statement, discuss where to find the following:

a. Account number	e. Minimum payment due
b. Credit limit	f. Due date
c. Balance	g. Activity
d. Available credit	h. Interest rate
3. Have students research what to do if their credit card is lost or stolen.

Day 2

4. Discuss steps to take in case of financial trouble. Please use the following talking points and ask students to take notes:
 - a. Stop making new charges and pay with cash
 - b. Set priorities and find ways to increase income and cut expenses
 - c. Pay more than the minimum balance if possible
 - d. Transfer balances to a lower interest rate credit card
 - e. Contact your lender and try to negotiate a lower interest rate
5. Discuss how to choose and contact a reputable debt counseling service (consumer.ftc.gov/articles/0153-choosing-credit-counselor).

Day 3: Assessment

1. Direct students to Assessment 3.1.1.
2. Have students complete the assessment with the notes from Activity 3.1.
3. Collect and grade the assessment.
4. File the assessment and notes behind Section 3: Spending and Credit, in the *Smart About Spending Student Workbook*.

Notes to instructor

Adventures in Education (aie.org/managing-your-money/credit-cards/reading-a-credit-card-statement.cfm) has a mouse-over feature that shows the different parts of a credit card statement.

3 Spending and Credit

ANSWER KEY 3.1.1

Name: _____ Date: _____

DIRECTIONS: Use the credit card statement to help answer the following questions.

1. Who is the owner of this account?
Ida Student
2. What is their credit limit? \$ 5,000.00
3. What is their balance? \$ 162.24
4. What is their minimum payment amount?
\$25.00
5. When is the minimum payment due?
11/18/2017
6. What is the interest rate on purchases?
13.24%
7. What is their available credit?
\$4,837.00
8. List three things to start doing to get out of financial trouble. Stop making new charges and pay with cash; Set priorities and find ways to increase income and cut expenses; Pay more than the minimum balance if possible; Transfer balances to a lower interest rate credit card; Contact your lender and try to negotiate a lower interest rate
9. True or False? There is a quick fix to resolve financial problems. False
10. Explain how to choose and contact a reputable debt counseling service.
Answers should include but are not limited to the following: Look for a nonprofit debt counseling service; Check with the Better Business Bureau or the Office of the Missouri Attorney General; Check with your employer or credit union; Verify membership status with national organizations; Avoid agencies that charge large fees; Avoid agencies that claim to be able to repair your credit quickly

CREDIT CARD STATEMENT

ACCOUNT SUMMARY

ACCOUNT NUMBER	NAME	OPENING/CLOSING DATE
4125-239-412	Ida Student	09/22/17-10/21/2017
TOTAL CREDIT LINE	AVAILABLE CREDIT	NEW BALANCE
\$5,000.00	\$4,837.00	\$162.24
		PAYMENT DUE DATE
		11/18/2017
		MINIMUM PAYMENT DUE
		\$25.00

ACCOUNT ACTIVITY

TRANSACTION DATE	DATE POSTED	ACTIVITY SINCE LAST STATEMENT	AMOUNT
9/22		Payment - Thank You	-201.50
10/18		Payment - Thank You	-347.22
10/01	10/01	Record Recycle Anytown, USA	7.00
10/07	10/08	Costumes Plus Anytown, USA	71.99
10/10	10/10	Music Emporium Tinyville, USA	.99
10/19	10/20	Grocery Mart Anytown, USA	61.85
10/20	10/20	Books Plus Anytown, USA	3.99
10/20	10/21	Super Fuel Big City, USA	16.42

Previous Balance	(+)	\$347.22
Payment, Credits	(-)	\$347.22
Purchases	(+)	\$162.24
Cash Advances	(+)	\$0.00
Finance Charges	(+)	\$0.00
Late Charges	(+)	\$0.00
New Balance	(=)	\$162.24

FINANCE CHARGE SUMMARY

	PURCHASES	ADVANCES	CUSTOMER SERVICE
Annual Percentage Rate	13.24%	6.48%	1-800-xxx-xxxx

FOR LOST OR STOLEN CARD
1-800-xxx-xxxx



Spending and Credit

ACTIVITY
3.2

Evaluate the terms and conditions of credit cards and consumer loans.

Purpose and description

The purpose of this lesson is to teach students the relevance of credit cards.

Objectives

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

1. State the purpose of a credit card
2. Know how to apply for a credit card
3. Find the credit card that is best suited for them

Required resources

Each student should have a copy of the *Smart About Spending Student Workbook*.

1. Worksheet 3.2.1
2. Worksheet 3.2.2
3. Computer lab with Internet access

Required class time

One (60 minutes) class period
60 minutes total

Assignment

Section 3: Spending and Credit
Worksheet 3.2.1
Worksheet 3.2.2

Procedure

1. Ask students to review their *Smart About Spending Student Workbook*, Section 3: Spending and Credit.
2. Break the class into small groups.
3. Have each group write down three pros and cons of having a credit card. Ask the groups to share their pros and cons list with the rest of the class.
4. Direct students to Worksheet 3.2.1.
5. Go to the computer lab.
6. Ask students to visit creditcards.org.
7. Using the worksheet, have each student select their top three credit cards.

Assessment

1. Have students complete Worksheet 3.2.2 about their top credit card pick. This essay should explain the application process and why they selected this credit card over others.
2. File worksheets behind Section 3: Spending and Credit, in the *Smart About Spending Student Workbook*.

Notes to instructor

1. Intro-Purchases: Some credit cards may give you a better APR for a certain amount of time or with your first purchase. After the time has expired or you have made your first purchase, the APR may increase.
2. Intro-Balances: Some companies may offer lower or 0 percent interest on any credit card balance you transfer from a different account. After the specified time has elapsed, the APR will increase.



Spending and Credit

ACTIVITY
3.3

Compare sources of consumer credit (e.g., credit cards, various loans).

Purpose and description

The purpose of this lesson is to help students understand the various ways in which they can fund their education beyond high school.

Objectives

At the end of this lesson, students will:

1. Know how to apply for federal and state aid grant programs and student loans (Free Application for Federal Student Aid)
2. Understand the difference between loans and gift aid (grants and scholarships)
3. Be familiar with state assistance programs and the various eligibility requirements
4. Understand the difference between subsidized and unsubsidized loans
5. Know how to reject loan funds
6. Understand how student loans can affect one's credit and potential buying power

Required resources

Each student should have a copy of the *Smart About Spending Student Workbook*.

1. Worksheet 3.3.1
2. Worksheet 3.3.2
3. Assessment 3.3.3
4. One copy of the Missouri Department of Higher Education's *The Missouri Source**
5. One copy of the Missouri Department of Higher Education's *Journey to College Online**
6. One copy of the Missouri Department of Higher Education's *Planning for Financial Success**
7. One copy of the U.S. Department of Education's *Do You Need Money for College? Federal Student Aid at a Glance* (fsapubs.gov)
8. Computer lab with Internet access

Required class time

Four (60 minutes) class periods
240 minutes total

Assignment

Section 3: Spending and Credit
Worksheet 3.3.1
Worksheet 3.3.2
Worksheet 3.3.3

Procedure

Day 1

1. Ask students to review their *Smart About Spending Student Workbook*, Section 3: Spending and Credit.
2. Have each student complete Worksheet 3.3.1 by investigating what school they are interested in attending.
 - a. Go to the computer lab.
 - b. Have students pick four postsecondary institutions to investigate. Students may use nces.ed.gov/collegenavigator if they need guidance.
 - c. Look up program/institution costs.

Day 2

3. Discuss with the class the difference between a loan and gift aid.
4. Distribute *Planning for Financial Success* and read over pages 4–7 as a class.
5. Direct students to Worksheet 3.3.2 to record today's findings in the "Federal aid" and "Institutional aid" sections.
6. Distribute *Do You Need Money for College* and discuss for which federal programs students may qualify.
7. Go to the computer lab.
8. Identify sources of institutional aid available and approximate amounts.



Spending and Credit

ACTIVITY 3.3

Day 3

9. Have students record today's findings in the "State aid" section of the worksheet.
10. Distribute *The Missouri Source* and *Journey to College Online*. Have students read over both publications.
11. Go to the computer lab.
12. Visit the Missouri Department of Higher Education's website (dhe.mo.gov/ppc/grants). Have students read over the "Missouri grants and scholarships" section. Advise students to write down the programs and amounts they may be eligible for during the current academic year.
13. Have students complete the worksheet. Have students double check their math to make sure they calculated the "Total you owe" section correctly.
14. Discuss how the "Total you owe" will need to be paid out of pocket.

Day 4: Assessment

1. Return the worksheets to students.
2. Divide students into groups and have them compare their findings. What was the most and least expensive school, and why? What financial aid would they potentially receive?
3. As a class, discuss the results of their findings. Were there any surprises? Is education more or less expensive than they imagined?
4. Direct students to Assessment 3.3.3. Have students complete the assessment using the publications as a guide.
5. Review and grade the assessment.
6. File all publications, research, worksheets and assessment from Activity 3.3 behind Section 3: Spending and Credit, in the *Smart About Spending Student Workbook*.

Notes to instructor

1. All postsecondary institutions are required to have a net price calculator available on their website. This tool should be used to calculate the actual cost of attending an institution. Instruct students to find this calculator when looking up program/institution costs. Identifying available funding sources for college can be complex. It is of critical importance that students have a basic understanding of available aid and, if they do not, they are able to find the resources they need.
2. *Missouri Department of Higher Education printed publications can be ordered free of charge (dhe.mo.gov/publications.html).
3. Give students the website for the FAFSA4caster (<https://fafsa.ed.gov/FAFSA/app/f4cForm?execution=e2s1>). Encourage students and their parents to complete the online form. Explain that this is not the actual FAFSA, but a tool for getting an early estimate of their eligibility for possible federal student aid.
4. The Missouri Department of Higher Education offers free in-person workshops about planning and paying for college for Missouri's teachers, financial aid community, high school counselors and other access professionals. To schedule a Missouri Department of Higher Education presentation for your class, please complete the speaking request form (<https://web.dhe.mo.gov/dhe/forms/speakingevents/speakingevent.faces>).



Spending and Credit

ANSWER KEY 3.3.3

Name: _____ Date: _____

1. Name the form that must be completed to apply for federal student aid and some state aid.
Free Application for Federal Student Aid (FAFSA)
2. How often does this form have to be completed? Annually, for each year a student plans to attend college
3. Explain the differences between loans, grants and scholarships.
Loans must be repaid with interest and everyone is eligible to receive them. Grants and scholarships are "gifts" that do not have to be repaid. Grants are typically awarded based on financial need. Scholarships are generally awarded based on academic performance and/or extracurricular participation (e.g., sports, music, community service, etc.).
4. When a financial aid officer says to borrow only what you need, what does that mean?
Students have the right to reject a portion or all of the loan amounts presented in their financial aid award letter (page 6, Planning for Financial Success).
5. Do you think you will need to take out student loans? Explain how student loans can affect your buying power.
Because student loans must be repaid, taking on too much debt while in school can lead to very high repayment amounts later. This limits money available to spend on other necessities and wants, or to save. If you fail to repay your loans (default), your income and credit history will be negatively impacted. Additionally, your loan balance will increase significantly due to collection costs.

4

Saving and Investing

Missouri Personal Finance Competencies covered in this section:

Compare consumer choices for saving and investing.

Explain the relationship between saving and investing.

Examine reasons for saving and investing (e.g., time value of money).

Compare the risk, return, liquidity, manageability, and tax aspects of investment alternatives.

Demonstrate how to buy and sell investments.

Analyze factors affecting the rate of return on investments (e.g., Rule of 72, simple interest, compound interest).

Evaluate sources of investment information.

Examine how agencies that regulate financial markets protect investors.

Demonstrate how to evaluate advisors' credentials and how to select professional advisors and their services.

4 Saving and Investing

ACTIVITY 4.1

Compare consumer choices for saving and investing.

Explain the relationship between saving and investing.

Examine reasons for saving and investing (e.g., time value of money).

Purpose and description

The purpose of this lesson is to teach the importance of saving for the future or unexpected events.

Objectives

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

1. Identify various methods of saving (e.g., savings account or money market)
2. Identify various methods of investing (e.g., mutual funds, stock market, bonds, etc.)

Required resources

Each student should have a copy of the *Smart About Spending Student Workbook*.

1. Worksheet 4.1.1
2. Computer lab with Internet access

Required class time

Two (60 minutes) class periods
120 minutes total

Assignment

Section 4: Saving and Investing
Worksheet 4.1.1

Procedure

Day 1

1. Ask students to read their *Smart About Spending Student Workbook*, Section 4: Saving and Investing.
2. Direct students to Worksheet 4.1.1 and ask them to fill it out as you speak.
3. Ask students if they have a savings account. Are they familiar with their interest rate?
4. Have students take notes as you discuss the following:
 - a. How savings can be categorized in four ways:
 - i. Savings from a paycheck deposited directly into a savings account
 - ii. Savings as a fixed expenditure
 - iii. Savings as a variable expenditure
 - iv. Savings as what is left over after all other expenditures are paid
 - b. Ask students what the benefits are of paying yourself first. Answer: If you rely on either of the last two methods of saving, you might not save at all. Therefore, determining how much you will save each month and working it into your budget will ensure that your savings will grow.
 - c. Discuss the advantages of having a savings account:
 - i. Readily accessible source of emergency cash
 - ii. Temporary holding place for funds in excess of those needed for daily living expenses
 - iii. Process for opening a savings account is similar to opening a checking account
 - iv. Freedom to make as many deposits or withdrawals as you want as long as your minimum balance is maintained
 - v. Transactions can usually be made through an ATM.
 - d. Ask students to explain the relationship between saving and investing.
 - i. You will earn interest on money you deposit in a savings account; however, the interest rate is usually very low. Longer-term savings instruments usually pay a higher rate of return.

4 Saving and Investing

ACTIVITY 4.1

- ii. Money market accounts pay a somewhat higher rate of return than savings accounts. They offer limited check-writing privileges. Money market accounts are offered by banks, savings and loans, credit unions, stock brokerage firms, financial services companies and mutual funds.
 - iii. To make your money work for you requires investing long term. Determine what your goals are for investing (e.g., down payment on a home, early retirement, etc.).
- e. What do you want to invest in? Mutual funds, stock market, bonds?
 - i. A mutual fund is an investment company that combines the funds of investors who have purchased shares of ownership in the investment company, and then invests that money in a diversified portfolio of stocks and bonds issued by other corporations and governments. Investing in a mutual fund reduces the risk you face when selecting individual stock and bond investments. Mutual funds also make it easy and convenient for investors to open an account and continue investing. This is the most common form of investment in the United States.
 - ii. Stocks represent potential income for investors. The owner of a stock is called a shareholder or stockholder. Stockholders own a piece of the future profits (or losses) of the company in which they have invested. Common stockholders may vote to elect the company's board of directors.
 - iii. A bond is an interest-bearing, negotiable certificate of long-term debt issued by a corporation, a municipality or the United States federal government. Bonds are basically IOUs. The initial purchases of the bond lends the issuer a certain amount of money (principal) and, in return, the issuer will pay interest over the life of the bond, and repay the investor's principal at some point in the future (maturity date).
 - iv. Aggressive investors might invest in limited real estate partnerships, undeveloped land, precious metals, gems, commodity futures, stock-index futures and collectibles.
 - v. While many (if not most) investments fall into one of two categories — equity and debt, better known as stocks and bonds — there are numerous alternative vehicles, which represent the most complicated types of securities and investing strategies.

- vi. The good news is that you probably do not need to worry about alternative investments at the start of your investing career. They are generally high-risk/high-reward securities that are much more speculative than plain old stocks and bonds. Yes, there is the opportunity for big profits, but they require some specialized knowledge. So, if you do not know what you are doing, you could get yourself into a lot of trouble. Experts and professionals generally agree that new investors should focus on building a financial foundation before speculating. (investopedia.com/university/beginner/beginner5.asp).
5. Research interest rates for savings accounts and money markets via the Internet or advertisements.
 6. Research mutual funds and stocks via the Internet or newspaper.

Day 2

7. Have representatives from two different banks come and speak to the class.
8. Ask guest speakers to talk about their current savings accounts and what related products they have to offer.
9. As your guests speak, have the class complete Worksheet 4.1.1. Provide opportunities for students to ask questions.

Assessment

1. Have students write a reflection about which bank they would select to service their savings account and why.
2. File Worksheet 4.1.1 and the reflection behind Section 4: Saving and Investing, in the *Smart About Spending Student Workbook*.

Notes to instructor

During the next class period, have a brief discussion about Worksheet 4.1.1. What kinds of information were the students able to find (e.g., names of mutual funds and stocks, price, change, world market vs. United States market, etc.)? Inquire about the types of investment funds they favored most. What kinds of bonds were they able to identify? What was the value?

4 Saving and Investing

ANSWER KEY
4.1.1

Name: _____ Date: _____

1. What are the four ways to save? 1. Savings from a paycheck deposited directly to a savings account
2. Savings as a fixed expenditure
3. Savings as a variable expenditure
4. Savings as what is left over after all other expenses are paid
2. What are the benefits of paying yourself first? If you rely on either of the last two methods of saving, you might not save at all. Therefore, determining how much you will save each month and working it into your budget will ensure that you pay yourself first and that your savings continues to grow.
3. What advantages does a savings account offer? Readily accessible source of emergency cash; Temporary holding place for funds in excess of those needed for daily living expenses; You may make as many deposits or withdrawals as you want as long as your minimum balance is maintained; Transactions can usually be made through an ATM
4. Name three avenues for investing: Mutual funds; Stock Market; Bonds
5. How much is the current interest rate on savings accounts? _____%
Students should get the answer from their guest speakers or individual research.
6. How much is the current interest rate on money markets? _____%
Students should get the answer from their guest speakers or individual research.
7. Name three mutual funds: Students should get the answer from their guest speakers or individual research.
8. What is the difference between mutual funds and stocks? A mutual fund is an investment company that combines the funds of investors who have purchased shares of ownership in the investment company, and then invests that money in a diversified portfolio of stocks and bonds issued by other corporations and governments. Stocks are investments that represent ownership in a particular company, also known as shares.

4 Saving and Investing

ANSWER KEY
4.1.1

9. If you had \$10,000 to invest, how would you invest it? Why? _____
Students should get the answer from their guest speakers or individual research.

10. What is diversification? _____
When an investor spreads their investment funds among different types of investments and industries.

Notes from guest speakers: _____

4 Saving and Investing

ACTIVITY 4.2

Analyze factors affecting the rate of return on investments (e.g., Rule of 72, simple interest, compound interest).

Purpose and description

The purpose of this activity is to help students better understand the Rule of 72 and simple vs. compound interest.

Objectives

At the end of this lesson students will be able to:

1. Calculate how long it will take to double their investment; and determine what interest rate will be needed in order to double their investment for a specified number of years.
2. Calculate simple interest and compound interest.

Required resources

Each student should have a copy of the *Smart About Spending Student Workbook*.

1. Worksheet 4.2.1
2. Calculator

Required class time

One (60 minutes) class period

Assignment

Section 4: Saving and Investing
Worksheet 4.2.1

Procedure

1. Ask students to review their *Smart About Spending Student Workbook*, Section 4: Saving and Investing.
2. Ask students to complete Worksheet 4.2.1.

Assessment

1. Grade worksheet
2. File worksheet behind Section 4: Saving and Investing, in the *Smart About Spending Student Workbook*.

Notes to instructor

i – interest
p – principal
r – rate
t – time
a – final amount
n – number of times per year interest is compounded

Simple interest formula: $i = prt$

Compound interest formula: $a = p(1 + r/n)^{nt}$

Rule of 72: $72 \div$ interest rate as whole number
e.g., if interest rate is 4 percent, it would take 18 years to double your principal ($72 \div 4 = 18$).

4 Saving and Investing

ANSWER KEY 4.2.1

Name: _____ Date: _____

1. If you borrowed \$3,000 for four years at 5% simple interest rate, how much interest would you pay?
\$600
2. How much would your initial loan amount be if you paid \$3,150 in interest and you had a 7% simple interest rate for six years? \$7,500
3. If you have a bank account with a principal of \$1,000 and your bank compounds the interest twice a year at an interest rate of 5%, how much money do you have in your account at the year's end? (Assume that you do not add or withdraw any money from the account.) \$1,050.63
4. You just received your first credit card. It charges 12.49% interest to customers and compounds that interest monthly. Within one day of getting your card you max out the credit limit by spending \$1200. If you do not buy anything else with the card and you do not make any payments, how much money would you owe after six months assuming no late fees are assessed? \$1,276.92
5. Regarding the Rule of 72 you read about on page 56,
 - A. How long would it take to double your investment with an interest rate of 3%? 24 years
 - B. How long would it take to double your investment with an interest rate of 11.75%? 6.1 years
acceptable answer: a little over six years

4 Saving and Investing

ACTIVITY 4.3

Examine how agencies that regulate financial markets protect investors.

Purpose and description

The purpose of this lesson is to educate students on agencies that regulate financial markets at both the state and national levels.

Objectives

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

1. Identify the state agencies involved in regulation and protection (and name the current Missouri secretary of state and attorney general)
2. Identify the federal agencies involved in regulation and protection

Required resources

Each student should have a copy of the *Smart About Spending Student Workbook*.

1. One copy of the attorney general's *Student Consumer Guide* (ago.mo.gov/docs/default-source/publications/studentguide.pdf)
2. One copy of *Investment Tips* (sos.mo.gov/securities/pubs/investment_tips.asp)
3. Computer lab with Internet access

Required class time

Two (60 minutes) class periods
120 minutes total

Assignment

Section 4: Saving and Investing

Procedure

Day 1

1. Ask students to review their *Smart About Spending Student Workbook*, Section 4: Saving and Investing.
2. Have representatives from the securities division for the Office of the Missouri Secretary of State and the consumer protection division for the Office of the Missouri Attorney General come and speak to the class.
3. Distribute copies of the *Student Consumer Guide* and *Investment Tips* to each student.

Day 2

4. Go to the computer lab.
5. Have students visit sipc.org, finra.org and nasaa.org.

Assessment

1. Ask students to write a summary of the presentations and the Internet search telling how this will protect them in the future.
2. File the publications and summary behind Section 4: Saving and Investing, in the *Smart About Spending Student Workbook*.

Notes to instructor

You may order paper copies of the *Student Consumer Guide* at ago.mo.gov/other-resources/publications/order-publications.

Important Terms and Resources

Terms students should know

401(k) plan: An employer-based plan whereby employees set aside money for retirement that is sometimes matched by employers.

Annual fee: The annual membership fee to have a credit card.

Annual percentage rate (APR): The cost of credit for one year expressed as a percentage.

Annuity: A contract or agreement whereby money is set aside for a specified period of time, at the end of which you begin receiving payments at regular intervals.

Appreciation: An increase in the basic value of an investment.

Automatic deductions: Authorized withdrawals from your checking account (e.g., insurance premiums, transfers to savings, or other payments).

Balance: To reconcile the sums of debits and credits in an account.

Bank: A financial institution that accumulates deposits and channels money into lending activities.

Bank statement: The record of debits, credits and all other activity on an account.

Bankruptcy: Legally insolvent; not capable of paying bills.

Bear market: A market characterized by generally falling prices over a period of several months or years.

Benefits: Sick pay, vacation time and other company-provided supplements to income.

Blue chip: Common stock of a company known nationally for the quality of its products and profitability.

Bond: Certificate representing a loan of money to a corporation or government for a specific period in exchange for a promise to repay bondholders the amount borrowed plus interest.

Broker: A representative who handles transactions related to investors' orders to buy and sell securities.

Budget: An organized plan that matches your expected income to your expected expenses.

Bull market: A market characterized by generally rising prices over a period of several months or years.

Business failure risk: The risk that a business will fail and the investment will be worthless, or that a business will be less profitable than expected.

Capital: The wealth of a business or an individual in terms of money or property.

Capital gain: The profit realized when a security is sold for more than the purchase price.

Capital loss: The decrease or expense realized when a security is sold for less than the purchase price.

Certified financial planner (CFP): An individual who has completed the educational requirements of the International Board of Certified Financial Planners (IBCFP), which covers all facets of financial planning, from taxes to investments.

Collateral: Savings, bonds, insurance policies, jewelry, property or other items that are pledged to pay off a loan or other debt if payments are not made according to the contract; also called security.

Commission: A broker's or an adviser's fee charged for buying or selling securities for an investor.

Commodity: An article of commerce or a product that can be used in commerce, such as agricultural products, metals, petroleum, foreign currencies, financial instruments and indexes.

Commodity Futures Trading Commission (CFTC): The federal regulatory agency that monitors the futures and options market.

Terms students should know

Common stock: The most basic form of corporation ownership. Owners of common stock have a claim on the assets of a company after those of preferred stockholders and bondholders.

Compound interest: Interest earned on interest that is added to the principal.

Consumer Financial Protection Bureau (CFPB): The central mission of the CFPB is to make markets for consumer financial products and services work better for Americans, including applying for a mortgage, choosing a credit card and more.

Convertible bond: A bond that an owner can exchange for stock before maturity.

Co-signer: Someone who signs a loan with the borrower and promises to assume the responsibility of repaying the debt in the event that the borrower does not repay it.

Coupon rate: Fixed annual interest rate quoted when a bond is issued.

Credit limit: The maximum amount of money you are authorized to borrow.

Credit report: A record of an individual's personal credit history; issued by a credit reporting agency.

Credit reporting agency: A for-profit company that accumulates, stores and distributes credit information (i.e., Equifax, Experian, TransUnion).

Depreciation: Loss in value of a consumer good during its lifetime; often associated with appliances and vehicles.

Discount: Sale of a bond at a price less than face value.

Diversification: Spreading investment funds among different types of investments and industries.

Dividend: Payment received by stockholders from the earnings of a corporation.

Dollar cost averaging: Investing the same fixed-dollar amount in the same investment at regular intervals over a long period of time.

Dow Jones industrial average: Price-weighted average of 30 actively traded stocks.

Exchanges: Marketplaces for transactions such as the New York Stock Exchange, the American Stock Exchange and the Chicago Board of Trade.

Face value: The amount a bond is worth when it matures.

Federal Deposit Insurance Corporation (FDIC): An agency of the federal government created to guarantee bank deposits.

Fee: 1) Extra charges by credit card companies for exceeding your credit limit, paying late, use of the card, etc.; 2) A charge for professional services.

Financial Industry Regulatory Authority (FINRA): The securities industry's largest self-regulatory organization.

Financial planner: Person who advises others about financial issues.

Fixed expenses: Costs that remain constant.

Fixed interest rate: An interest rate that does not change.

Full-service brokers: People who buy and sell securities or commodities to investors and offer information and advice.

Futures contract: A legal commitment to buy or sell a commodity at a specific future date and price.

Grace period: 1) The amount of time you have to pay your credit card balance or loan without paying interest; 2) A six-month period of time after you graduate or drop below half time that you are not required to make student loan payments.

Terms students should know

Gross income: All taxable income received, including wages, tips, salaries, interest, dividends, unemployment compensation, alimony and others.

Hedging: The process of protecting an investment against price increases.

Income: Money that comes in from property, business, work and gifts.

Individual Retirement Account (IRA): A tax-deferred savings account.

Inflation: A general rise in prices of goods and services; this reduces the purchasing power of money.

Inflation risk: The risk that the financial return on an investment will lose purchasing power due to a general rise in prices of goods and services.

Insider trading: The illegal use of investment information not generally known to the public.

Interest: 1) Fee for borrowing money; 2) Funds received by placing your money in a savings account, money market, CD, etc.

Interest rate risk: The risk that the value of a long-term, fixed return investment will decrease due to a rise in interest rates.

Junk bonds: High-risk bonds that are issued by corporations of little financial strength. Interest rate is high, but default rate is also high.

Line of credit: A pre-established amount that can be borrowed on demand.

Liquidity: The ease with which an investment can be converted into cash.

Load fund: A mutual fund purchased directly by the public that charges a sales commission when bought.

Loan: Borrowed money that must be repaid with interest.

Margin: A brokerage account allowing customers to buy securities with money borrowed from the broker.

Market price: The price the seller will accept and the buyer will pay.

Market risk: The risk that the price of stocks, real estate, or other investments will go down due to business cycles or other causes.

Mutual fund: A company that invests the pooled money of its shareholders in various types of investments.

National Association of Securities Dealers Automated Quotations (NASDAQ): The world's largest screen-based stock market built totally out of telecommunications networks and computers.

Needs: The things necessary for survival — typically food, clothing and shelter.

No-load fund: A mutual fund purchased directly by the public; does not have a charge for buying.

North American Securities Administrators Association (NASAA): An organization of securities administrators charged with enforcing securities laws and protecting investors from fraudulent investments.

Opportunity cost: What you give up in order to obtain something. Each time you choose to expend a resource on something, you give up the opportunity to expend that same resource on something else.

Option: The right to buy or sell property that is granted in exchange for an agreed upon sum. If the right is not exercised after a specified period, the option expires and the option buyer forfeits the money.

Ponzi scheme: An illegal investment scam named for its inventor, Charles Ponzi, who became notorious for using the technique in the 1920s.

Terms students should know

Portfolio: The total investments held by an individual.

Preferred stock: Ownership in a corporation that has a claim on assets and earnings of a company before those of common stockholders, but after bondholders.

Prospectus: A document describing an investment offered for sale.

Pyramid scheme: Fraudulent scheme where an investor buys the right to be a sales representative for a product. Those in the scheme early may profit; those joining late will lose.

Rate of return: A combination of yield (dividends or interest) and appreciation.

Redemption fee: A charge levied by the mutual fund when shares are sold.

Return: The total income from an investment; includes income plus capital gains or minus capital losses.

Risk: In an investment, the uncertainty that you will get an expected return.

Risk tolerance: A person's capacity to endure market price swings in an investment.

Rule of 72: A mathematical tool used to determine the length of time needed to double an investment at a given interest rate. The formula is as follows: Divide the number 72 by the interest rate.

Securities: A broad range of investment instruments, including stocks, bonds and mutual funds.

Securities and Exchange Commission (SEC): A federal agency established to license brokerage firms and regulate the securities industry.

Security Investors Protection Corporation (SIPC): A nonprofit corporation created by Congress. Insures investors in SIPC-insured firms from financial loss due to financial failure of the brokerage firm. Insures up to \$500,000 per customer.

Stock: An investment that represents ownership in a company, also known as a share.

Stock split: Increase in a corporation's number of outstanding shares of stock without any change in the shareholders' equity or the aggregate market value at the time of the split. In a split, the share price declines.

Tax-exempt investments: Investments that are not subject to tax on income earned (e.g., municipal bonds sold by state and local governments).

Time value of money: Increase in an amount of money over time as a result of investment earnings.

Wants: The things you desire over and above the things you need.

Warrant: A type of security, usually issued together with a bond or preferred stock. The warrant entitles the holder to buy a proportionate amount of common stock at a specific price.

Yield to maturity: The total annual rate of return on a bond when it is held to maturity.

Zero coupon bonds: Bonds issued for less than face value; they pay no interest income. Return to the investor occurs when the bond is sold or redeemed; also called deep discount bonds.

Resources

Council for Economic Education

econedlink.org

The Council for Economic Education provides a premier source of classroom-tested, Internet-based economic and personal finance lesson materials for K–12 teachers and their students. With over 698 lessons to choose from, teachers can use as many of the lessons as they like and as often as they like. This site includes lessons, data resources, links, newsletters and interactive tools.

Federal Reserve System

federalreserve.gov

The task of the Federal Reserve System is to maintain employment, keep prices stable, and keep interest at a moderate level by regulating monetary policy. Components of the Federal Reserve System also supervise banks, provide financial services, and conduct research of the United States economy and the economies in the surrounding region.

Federal Reserve Bank of Kansas City The Money Museum: a billion dollar experience

kc.frb.org

kansascityfed.org/moneymuseum

The Federal Reserve Bank of Kansas City and its branches serve the seven states of the 10th Federal Reserve District: Colorado, Kansas, Nebraska, Oklahoma, Wyoming, northern New Mexico and western Missouri. Teachers can bring economics and personal finance lessons to life for their students with a field trip to the Money Museum at the Federal Reserve Bank of Kansas City. The Money Museum offers real-world illustrations of the economy and the Federal Reserve in action. In addition, educators can choose from a variety of lesson plans (before, during or after their visit) for 5th–12th grade students.

Federal Reserve Bank of St. Louis Inside the Economy Museum

stlouisfed.org

stlouisfed.org/inside-the-economy-museum

The Federal Reserve Bank of St. Louis was established in 1914. The 8th Federal Reserve District is headquartered in St. Louis and has branches in Little Rock, Ark., Louisville, Ky., and Memphis, Tenn. This site includes lesson plans, whiteboard activities, videos, podcasts,

activities and interactive links. Explore opportunities for teacher professional development, including Continuing Professional Development Units, and for making your school a Community Education Partner with the Federal Reserve Bank of St. Louis. The award-winning Inside the Economy[®] Museum inside the historic Federal Reserve Bank of St. Louis will immerse you in a one-of-a-kind experience that explains the economy, and your role in it, in a fun and interactive way.

Journey to College

facebook.com/journeytocollege

twitter.com/Journey2College

Developed for Missouri students, Journey to College provides an avenue to obtain a variety of information geared toward future college students. Your questions and comments are welcomed. To help ensure your students are prepared for all that college has to offer, click “Like” at facebook.com/journeytocollege. If you prefer to tweet, the Missouri Department of Higher Education has created a Twitter account to assist students. Receive short updates regarding various scholarship opportunities, federal and state aid deadlines and money management tips by following Journey to College at twitter.com/Journey2College.

LifeSmarts

lifesmarts.org

LifeSmarts is an educational opportunity that develops the consumer and marketplace knowledge and skills of teenagers in a fun way and rewards them for this knowledge. LifeSmarts topics have been chosen to encourage and reward knowledge in the areas that matter most to consumers and workers in today’s marketplace: personal finance; health and safety; the environment; technology; and consumer rights and responsibilities. The site includes calendars, lessons, quizzes, scavenger hunts, fast facts and additional resources.

Mint

mint.com

At Mint, money is for living. Everything is simple and streamlined. Sign up takes less than five minutes. Then Mint automatically pulls all your financial information into one place, so you can finally get the entire picture.

Resources

Missouri Connections

MissouriConnections.org

Missouri Connections allows you to take career system assessments, build a portfolio, and create a career and academic course plan. If your school does not participate in Missouri Connections, you can register as a guest.

Missouri Department of Economic Development

ded.mo.gov

The Missouri Department of Economic Development works through a variety of programs to ensure the economic vitality of Missouri by creating and retaining jobs and investments.

Missouri Department of Higher Education

dhe.mo.gov

The Missouri Department of Higher Education conducts outreach activities, such as Apply Missouri, FAFSA Frenzy, and Decision Day, to increase awareness among Missourians regarding opportunities for postsecondary education and student financial assistance. Through its financial literacy activities and student loan default prevention initiatives, the Missouri Department of Higher Education also strives to help students avoid accumulating credit card and other types of debt as well as avoid defaulting on their educational loans.

Missouri Department of Revenue

dor.mo.gov

The mission of the Missouri Department of Revenue is to facilitate the proper functioning of state and local government by accurately and efficiently collecting and distributing state and local revenues.

Practical Money Skills

practicalmoneyskills.com

Practical Money Skills provides educators, parents, and students with free educational resources, including personal finance articles, games, lesson plans and more. Lesson plans are in PowerPoint format.

Field trip opportunities

- Federal Reserve Bank of Kansas City
The Money Museum: A billion dollar experience
kansascityfed.org/moneymuseum
- Federal Reserve Bank of St. Louis
Inside the Economy Museum
stlouisfed.org/inside-the-economy-museum/educators
- United States Mint virtual tour
usmint.gov/mint_tours/?action=vtShell
- Local banks, investment firms, or credit unions

Suggested guest speakers

Consider inviting one or more of the following to your classroom:

- Certified public accountant
- Consumer credit counselor
- County collector (or similar elected officials)
- Financial advisor
- Financial aid officer
- Loan officer
- Missouri Department of Higher Education accredited financial counselor (<https://web.dhe.mo.gov/dhe/forms/speakingevents/speakingevent.faces>)



Missouri Department of Higher Education // P.O. Box 1469, Jefferson City, MO 65102-1469
800-473-6757 // 573-751-3940 // Fax: 573-751-6635 // dhe.mo.gov // info@dhe.mo.gov
facebook.com/journeytocollege // twitter.com/Journey2College

The Missouri Department of Higher Education administers a variety of federal and state grant, scholarship, and financial literacy programs. For more information about student financial assistance, contact the Missouri Department of Higher Education at 800-473-6757 or 573-751-3940. The Missouri Department of Higher Education has no control over, or responsibility for, material on other websites provided in this document. The Missouri Department of Higher Education does not verify the information on linked sites and does not endorse these sites or their sources. Links are provided as a convenience only to Missouri Department of Higher Education customers. The Missouri Department of Higher Education makes every effort to provide program accessibility to all citizens without regard to disability. If you require this publication in an alternate form, contact the Missouri Department of Higher Education at 800-473-6757 or 573-751-3940. Hearing/Speech impaired citizens may call 800-735-2966. Content accurate at time of printing, April 2017. For the latest information, visit dhe.mo.gov or studentaid.gov. © 2017 Missouri Department of Higher Education