

STEM - Financial Literacy

Content Area: **Technology**
Course(s): **Technology 6**
Time Period: **September**
Length: **10 Weeks**
Status: **Published**

Unit Overview

In this class, students will learn the basics about Financial Literacy, practice everyday math skills related to money and financing, and learn about the history of currency used in the United States.

Students will begin with the history of currency and how ancient people used trading to acquire items and services needed. We will continue with the evolution of currency and development of today's money system. Next, Financial Psychology will be explored; this will include how emotions, attitudes, and behaviors (rational and irrational) impact financial decisions. In addition students will also explore how culture and family beliefs can also impact financial decisions.

Next, students will learn how to make objective financial decisions when shopping. Students will learn how to use comparison shopping; students will learn how to use Unit Price calculations when shopping for groceries.

Other topics to be discussed: income & careers, future planning, credit & borrowing, and saving.

Priority Standards

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of

these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

MATH.6.RP.A.3.b

Solve unit rate problems including those involving unit pricing and constant speed.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

MATH.6.RP.A.3.c

Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means $30/100$ times the quantity); solve problems involving finding the whole, given a part and the percent.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see 7×8 equals the well-remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$ older students can see the 14 as 2×7 and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y .

MATH.6.NS.C.7.c

Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation.

PFL.9.1.8.FP

Financial Psychology

PFL.9.1.8.FP.1

Describe the impact of personal values on various financial scenarios.

PFL.9.1.8.FP.2

Evaluate the role of emotions, attitudes, and behavior (rational and irrational) in making financial decisions.

PFL.9.1.8.FP.3

Explain how self-regulation is important to managing money (e.g., delayed gratification, impulse buying, peer pressure, etc.).

PFL.9.1.8.FP.4

Analyze how familial and cultural values influence savings rates, spending, and other financial decisions.

Humans depend on Earth's land, ocean, atmosphere, and biosphere for many different resources. Minerals, fresh water, and biosphere resources are limited, and many are not renewable or replaceable over human lifetimes. These resources are distributed unevenly around the planet as a result of past geologic processes.

Analyzing data 6–8 builds on grades K–5 and progresses to extending quantitative analysis to investigations, distinguishing between correlation and causation, and basic statistical techniques of data and error analysis.

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| | Graphs, charts, and images can be used to identify patterns in data. |
| SCI.MS-ESS3-3 | Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment. Human activities have significantly altered the biosphere, sometimes damaging or destroying natural habitats and causing the extinction of other species. But changes to Earth's environments can have different impacts (negative and positive) for different living things. All human activity draws on natural resources and has both short- and long-term consequences, positive as well as negative, for the health of people and the natural environment. Although one design may not perform the best across all tests, identifying the characteristics of the design that performed the best in each test can provide useful information for the redesign process—that is, some of those characteristics may be incorporated into the new design. |
| PFL.9.1.8.A.6 | Explain how income affects spending decisions. |
| PFL.9.1.8.B | Money Management |
| PFL.9.1.8.E | Becoming a Critical Consumer |
| PFL.9.1.8.E.1 | Explain what it means to be a responsible consumer and the factors to consider when making consumer decisions. |
| PFL.9.1.8.E.2 | Identify personal information that should not be disclosed to others and the possible consequences of doing or not doing so. |
| PFL.9.1.8.E.4 | Prioritize personal wants and needs when making purchases. |

Unit Learning Goals/Targets

- Analyze the trade offs between saving and spending and good and bad decisions.
- Apply smart decision-making strategies to purchases.
- Create a savings plan to meet short- and long-term goals.
- Create and balance a budget between needs vs. wants.

Essential Questions

- How do financial goals vary across a person's lifetime?
- How does organized record keeping impact finances?
- In what ways does money management impact reaching financial goals?
- What constitutes sound financial decision making?
- What factors impact a person's spending plan?

Materials and Resources

- Google Classroom
- https://njfinlit.enrich.org/?utm_campaign=20220418_nwsltr&utm_medium=email&utm_source=govdelivery

- <https://www.mymoney.gov/for-teachers>
- Internet Access
- NGPF: Next Gen Personal Finance <https://www.ngpf.org/>
- Student Chromebook or Device

Unit Assessments

Financial Literacy Benchmark Assessment will be given at the beginning of course and the end of the course.

Quizzes and Tests will be given according to topics covered.

Learning Plan

| Class | Standard Description | Standard ID | Target | Learning Plan |
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| Week 1 Class 1 | Welcome & Introduction to Expectations & Requirements | | Welcome Back to School; Introduction, Expectations, & Seating Arrangements | <p>Students will be introduced to the scope & expectations of this class. Topics will include:</p> <ul style="list-style-type: none"> • Personal Introduction • Behavior Expectations • Safety Expectations including overview of procedures for drills; evacuation, fire, lockdown, etc. • Academic Expectations • Daily Procedures/requirements |

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| <p>Week 1 Class 2</p> | <p>Financial Psychology</p> <p>Describe the impact of personal values on various financial scenarios.</p> <p>Evaluate the role of emotions, attitudes, and behavior (rational and irrational) in making financial decisions.</p> | <p>PFL.9.1.8.FP</p> <p>PLF.9.1.8.FP.1</p> <p>PLF.9.1.8.FP.2</p> <p>CS.6-8.8.2.8ITH.1</p> | <p>Get to Know Your Teacher, Basic Google Classroom Navigation, "I Can Do Anything!"</p> | <p>Welcome to STEAM: Financial Literacy Class!</p> <p>This class will help you begin to think about financial topics and learn how to make decisions about earning, spending, and saving money.</p> <p>So, today we are going to start off with some basics.</p> <p>Financial Literacy is a Special, so you will have this class 4 days each 6-day cycle for 1 Trimester. All lessons & assignments will be completed in class; however, if you need more time, you may complete the assignment outside of the class period, but it must be completed by the due date. In addition, if you are absent, for ANY reason you will need to make up the lesson & the assignment before the next class period.</p> <p>Since this is our first week of lessons, our target for today is: Get to Know Your Teacher, Basic Google Classroom Navigation, and "I Can Do Anything!"</p> <p>Today in class we will cover the following: <i>Items 1-4 will be a review of the last class meeting. Items 5 & 6 are new today.</i></p> <p>1. Seating Assignments: In this class, you will be able to choose your own seat. Once the choice is made, this will become your permanent seat. Under certain circumstances, seat changes may be made, but these will be done on an individual basis and discussed between the student & the teacher. You will be expected to sit in your regular seat unless directed by the teacher to change it.</p> <p>2. What to Bring to Class: Your</p> |
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CHARGED Chromebook

3. Safety Protocols

4. Teacher Introduction & "What is Financial Literacy" Discussion

5. Expectations of Class and How to Access Lessons & Materials

6. Take Financial Literacy Pre-Assessment (This is NOT part of your report card grade, it will be used a benchmark for determining your knowledge growth throughout the school year.)

[Benchmark Assessment \(Pre-Test\)](#)

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| Week 1 Class 3 | History of Money | <p>SCI.MS.ESS3-3</p> <p>PFL.9.1.8.FP</p> <p>CS.6-8.8.2.8ITH.2</p> <p>CS.6-8.8.2.8ITH.3</p> | I can understand and explain how over time the need for a money system developed. I can explain how in ancient times trading of goods/services was the method used, but over time, the use of coins & bills became more practical. | <p>Students will explore how modern day currency evolved from ancient times and has changed as society has changed.</p> <p>Instruction will include a combination of direct instruction, student independent research and class activities.</p> |
| Week 1 Class 4 | History of Money | <p>SCI.MS.ESS3-3</p> <p>PFL.9.1.8.FP</p> <p>CS.6-8.8.2.8ITH.2</p> <p>CS.6-8.8.2.8ITH.3</p> | I can understand and explain how over time the need for a money system developed. I can explain how in ancient times trading of goods/services was the method used, but over time, the use of coins & bills became more practical. | <p>Students will explore how modern day currency evolved from ancient times and has changed as society has changed.</p> <p>Instruction will include a combination of direct instruction, student independent research and class activities.</p> |
| Week 2 (4 Class periods) | The Science of Making Money | <p>SCI.MS.ESS3-3</p> <p>PFL.9.1.8.FP</p> <p>CS.6-8.8.2.8EC2</p> <p>CS.6-8.8.2.8ITH.3</p> | I can understand and explain how physical money is made in the United States and how it has evolved over time. | <p>Students will explore how modern day currency evolved from ancient times and has changed as society has changed.</p> <p>Instruction will include a combination of direct instruction, student independent research and class activities.</p> |
| Week 3 (2 Class periods) | Financial Psychology | <p>PFL.9.1.8.FP</p> <p>PLF.9.1.8.FP.1</p> | Target: I can evaluate the role of emotions, attitudes, and behavior (rational and irrational) in | Today's class will focus on academic vocabulary. |

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| | <p>Describe the impact of personal values on various financial scenarios.</p> <p>Evaluate the role of emotions, attitudes, and behavior (rational and irrational) in making financial decisions.</p> | <p>PLF.9.1.8.FP.2</p> <p>CS.6-8.8.2.8ITH.1</p> | <p>making financial decisions.</p> <p>Week 3 Target & Scale</p> | <p>Week 3 Activity Overview</p> |
| <p>Week 3 (2 Class periods)</p> | <p>Financial Psychology</p> <p>Describe the impact of personal values on various financial scenarios.</p> <p>Evaluate the role of emotions, attitudes, and behavior (rational and irrational) in making financial decisions.</p> | <p>PFL.9.1.8.FP</p> <p>PLF.9.1.8.FP.1</p> <p>PLF.9.1.8.FP.2</p> | <p>Target: I can evaluate the role of emotions, attitudes, and behaviors in making financial decisions.</p> <p>Week 4 Target & Scale</p> | <p>Activities will focus on how to distinguish between Wants vs. Need.</p> <p>Week 4 Wants vs. Needs Presentation (read only).pdf</p> |
| <p>Week 4 (4 Class periods)</p> | <p>Financial Psychology</p> <p>Describe the impact of personal values on various financial scenarios.</p> | <p>PFL.9.1.8.FP</p> <p>PLF.9.1.8.FP.1</p> <p>PLF.9.1.8.FP.2</p> <p>PFL.9.1.8CP.1</p> | <p>Target: I can evaluate the role of emotions, attitudes, and behaviors in making financial decisions.</p> <p>Week 5 Target & Scale</p> | <p>This week students will focus on the physiological aspects of making money decisions; including emotions, attitudes, and cultural influences.</p> <p>Week 5: Emotions, Attitudes, and Behaviors Impact Financial Decisions</p> |

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| | <p>Evaluate the role of emotions, attitudes, and behavior (rational and irrational) in making financial decisions.</p> <p>Compare prices for the same goods or services.</p> | | | Week 4 & 5: Target & Scale |
| Week 5 (4 Class periods) | Money Math: Introduction to Unit Price | <p>Math.6.RP.A.3.b</p> <p>CS.6-8.8.1.8DA.1</p> | | Week 5 Unit Price Instruction will include a combination of direct instruction, student independent research and class activities. |
| Week 6 (3 Class periods) | More Money Math: Menus | <p>Math.6.RP.A.3.b</p> <p>Math.6.RP.A.3.c</p> <p>Math.6.NS.C.7.c</p> <p>CS.6-8.8.1.8DA.1</p> | | Week 6 Instruction will include a combination of direct instruction, student independent research and class activities. |
| Week 6 Class 4: Assessment | | | | |
| Week 7 (2 Class periods) | Protect Yourself From Fraud | <p>PFL.9.1.8.E</p> <p>PFL.9.1.8.E.1</p> <p>PFL.9.1.8.E.2</p> <p>CS.6-8.8.2.8EC.1</p> <p>CS.6-8.1.2.8NI.3</p> | I can recognize and identify sources of fraud and can take action to protect myself from harm. | <p>A big part of your Financial Life & Well-Being is about protecting yourself & your assets.</p> <p>In order to protect yourself successfully, you need to be aware of the possible habits or obstacles you may encounter. Today you will read about some of the</p> |

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| | | | | <p>dangers lurking in our world and find some tips on avoiding the dangers.</p> <p>Instruction will include a combination of direct instruction, student independent research and class activities.</p> |
| <p>Week 7 (2 Class Periods)</p> | <p>My Future Life: Making Decisions About Education & Careers</p> | <p>PFL.9.1.8.A PFL.9.1.8.A.2 CS.6-8.8.1.8.1C.1</p> | <p>I can set goals for myself regarding what I want to achieve in a careers and plan for the necessary education required.</p> | <p>Students will explore various types of education including trade schools, apprenticeships, Associates & Bachelor Degrees, as well as advanced degrees.</p> <p>In addition, students will explore career paths and the requirements to follow those paths.</p> <p>Included in this unit is a self-inventory of skills and strengths.</p> <p>Instruction will include a combination of direct instruction, student independent research and class activities.</p> |
| <p>Week 8 (2 Class Periods)</p> | <p>Budgeting</p> | <p>Math.6.RP.A.3.b Math.6.RP.A.3.c Math.6.NS.C.7.c CS.6-8.8.2.8ITH.1 CS.6-8.8.2.8ITH.2</p> | <p>I can understand and explain how a budget can help me meet my financial goals and I can develop a simple budget for myself.</p> | <p>Students will be introduced to various personal budgeting methods, and will learn how their own personality will determine which method might be best for them. They will also understand that methods can be modified or changed over time as needed to be efficient.</p> |

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| | | | | Instruction will include a combination of direct instruction, student independent research and class activities. |
| Week 8 (2 Class Periods) | Introduction to Credit | Math.6.RP.A.3.b Math.6.RP.A.3.c Math.6.NS.C.7.c CS.6-8.1.2.8NI.3 | I can understand and explain that using credit has a cost and that I must consider all the costs involved before borrowing. | Students will be introduced to vocabulary used by banks & creditors. Interest rates and credit agreements will be explored including Schumer Boxes. Instruction will include a combination of direct instruction, student independent research and class activities. |
| Week 9 (4 Class Periods) | Credit Scores, Reports, & Using Credit Wisely | Math.6.RP.A.3.b Math.6.RP.A.3.c Math.6.NS.C.7.c CS.6-8.8.1.8.DA.1 CS.6-8.8.2.8EC.1 | I can understand and explain how credit scores & reports are created, and how these scores & reports will affect me personally & financially. | Students will explore & learn how credit scores are calculated as well as learn how credit reports are generated. Instruction will include a combination of direct instruction, student independent research and class activities. |
| Week 10 (4 Class Periods) | Money in Everyday Life | PFL.9.1.8.B PFL.9.1.8.E.1 PFL.9.1.8.FP.3 CS.6-8.8.2.8ITH.2 | I can understand and explain that I make money decisions everyday, and each of these decisions play an important role in my financial well being. | Students will explore various scenarios involving money decisions. They will actively work out the scenarios and draw conclusions through the class activities. |
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Strategies for Multilingual Learners

As needed and appropriate for students, in compliance with IEPs, 504s, or other circumstances. Differentiation

techniques include, but are not limited to: reteaching, alternate assessments, breaking assignments into smaller segments, etc.

- Consult with ELL Teacher regarding student's specific needs
- Utilize language programs, Google Translate, and other programs as needed and appropriate

Strategies for Students in Need of Intervention

As needed and appropriate for students, in compliance with IEPs, 504s, or other circumstances. Differentiation techniques include, but are not limited to: reteaching, alternate assessments, breaking assignments into smaller segments, etc.

- Modify assessments, provide alternate assessments as appropriate
- Reteach as necessary
- Utilize various programs to remediate learning as needed

Technology Integration

- Chromebook or Device
- Teacher PC/Projector

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| CS.6-8.8.1.8.CS.4 | Systematically apply troubleshooting strategies to identify and resolve hardware and software problems in computing systems. |
| CS.6-8.8.1.8.DA.1 | Organize and transform data collected using computational tools to make it usable for a specific purpose. |
| CS.6-8.8.1.8.IC.1 | Compare the trade-offs associated with computing technologies that affect individual's everyday activities and career options. |
| CS.6-8.8.1.8.NI.3 | Explain how network security depends on a combination of hardware, software, and practices that control access to data and systems. |
| CS.6-8.8.2.8.EC.1 | Explain ethical issues that may arise from the use of new technologies. |
| CS.6-8.8.2.8.EC.2 | Examine the effects of ethical and unethical practices in product design and development. |
| CS.6-8.8.2.8.ITH.1 | Explain how the development and use of technology influences economic, political, social, and cultural issues. |
| CS.6-8.8.2.8.ITH.2 | Compare how technologies have influenced society over time. |

Interdisciplinary Connections

Reading Comprehension: Articles on Emotions & Culture Influence on Financial Decision Making

Writing: Students will respond to prompts, answer questions, and explain their thought process through their writing.

Social Studies: Culture & Financial Decision Making, History of Money (exchange of goods/services and payment methods used throughout history)

Math: Using a calculator (on Chromebook); calculating averages, price per unit, sales tax on purchases, understanding data: mean, mode, and median

Science: Psychology of money management, science of making money-natural resources: gold, silver, metals, paper/science of preventing counterfeiting

Technology: The technology and transformation of payment methods from trading resources through to current electronic currency

21st Century Life & Career Ready Practices

- CRP3. Attend to personal health and financial well-being.

Strategies for Enrichment

As needed and appropriate for students, in compliance with IEPs, 504s, or other circumstances. Differentiation techniques include, but are not limited to: reteaching, alternate assessments, breaking assignments into smaller segments, etc.

- Provide alternate assignments/related content to provide student enrichment & engagement