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(xy)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 realworld situation.

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.

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

SCI.MS-ESS3-3

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

Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

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.

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.

Graphs, charts, and images can be used to identify patterns in data.

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.

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.

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

 $https://nj fin lit.enrich.org/?utm_campaign=20220418_nwsltr\\ \&utm_medium=email\\ \&utm_source=gov delivery$

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

Unit Assessments

Financial Literacy Benchmark Assessment with 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

Learning Plan				
Class	Standard Description	Standard ID	Target	Learning Plan
Week 1 Class 1			Welcome Back to School; Introduction, Expectations, & Seating Arrangements	Students will be introduced to the scope & expectations of this class. Topics will include: • Personal Introduction • Behavior Expectations • Safety Expectations including overview of procedures for drills; evacuation, fire, lockdown, etc. • Academic Expectations • Daily Procedures/requireme nts

				Welcome to STFAM: Financial
Week 1 Class 2	Financial Psychology Describe the impact of personal values on various financial scenarios. Evaluate the role of emotions, attitudes, and behavior (rational and irrational) in making financial decisions.	PFL.9.1.8.FP PLF.9.1.8.FP.1 PLF.9.1.8.FP.2	Get to Know Your Teacher, Basic Google Classroom Navigation, "I Can Do Anything!"	Welcome to STEAM: Financial Literacy Class! This class will help you begin to think about financial topics and learn how to make decisions about earning, spending, and saving money. So, today we are going to start off with some basics. 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. 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!". Today in class we will cover the following: Items 1-4 will be a review of the last class meeting. Items 5 & 6 are new today. 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
				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

			CHARGED Chromebook
			3. Safety Protocols
			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-
			<u>Test</u>)
W1-1 Cl 2	112-4 e	T 1	
Week 1 Class 3	History of	I can understand	

	Money		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.	
Week 1 Class 4	History of Money		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.	
Week 2 (4 Class periods)	The Science of Making Money		I can understand and explain how physical money is made in the United States and how it has evolved over time.	
Week 3 (2 Class periods)	Financial Psychology Describe the impact of personal values	PFL.9.1.8.FP PLF.9.1.8.FP.1 PLF.9.1.8.FP.2	Target: I can evaluate the role of emotions, attitudes, and behavior (rational and irrational) in making financial decisions.	Today's class will focus on academic vocabulary. Week 3 Activity Overview

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

	decisions. Compare prices for the same goods or services.			
Week 5 (4 Class periods)	Money Math: Introduction to Unit Price	Math.6.RP.A.3.b		Week 5 Unit Price
Week 6 (3 Class periods)	More Money Math: Menus	Math.6.RP.A.3.b Math.6.RP.A.3.c Math.6.NS.C.7.c		Week 6
Week 6 Class 4: Assessment				
Week 7 (2 Class periods)	Protect Yourself From Fraud		I can recognize and identify sources of fraud and can take action to protect myself from harm.	A big part of your Financial Life & Well-Being is about protecting yourself & your assets. 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 dangers lurking in our world and find some tips on avoiding the dangers.
	My Future Life: Making		I can set goals for myself regarding what I want to achieve in a	Students will explore various types of education including trade schools, apprenticeships, Associates & Bachelor Degrees, as well as advanced degrees.

				requirements to follow those paths. Included in this unit is a self-inventory of skills and strengths.
Week 8 (2 Class Periods)	Budgeting	Math.6.RP.A.3.b Math.6.RP.A.3.c Math.6.NS.C.7.c	I can understand and explain how a budget can help me meet my financial goals and I can develop a simple budget for myself.	
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	I can understand and explain that using credit has a cost and that I must consider all the costs involved before borrowing.	
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	I can understand and explain how credit scores & reports are created, and how these scores & reports will affect me personally & financially.	
Week 10 (4 Class Periods)	Money in Everyday Life		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.	

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 approriate

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

		1 1	.	
•	('hrom	ehook	or Device	2

 Teacher 	PC/	'Pro	jector
-----------------------------	-----	------	--------

TECH.8.1.8.E.1	Effectively use a variety of search tools and filters in professional public databases to find
	information to solve a real world problem.

TECH.8.1.8.E.CS2 Locate, organize, analyze, evaluate, synthesize, and ethically use information from a

variety of sources and media.

TECH.8.1.8.E.CS3 Evaluate and select information sources and digital tools based on the appropriateness for

specific tasks.

TECH.8.1.8.E.CS4 Process data and report results.

TECH.8.1.8.F Critical thinking, problem solving, and decision making: Students use critical thinking skills

to plan and conduct research, manage projects, solve problems, and make informed

decisions using appropriate digital tools and resources.

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

Strategies for Enrichment

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

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