

Welcome!

Please introduce yourself in the chat and tell us, did you learn about finance growing up?



National Girls
Collaborative Project



NGCP 

CONNECT + CREATE + COLLABORATE

A Focus on Finance for Engaging Elementary-Aged Girls

May 16, 2024



NGCP Vision

The vision of the National Girls Collaborative Project is to **support and create STEM experiences** that are as **diverse as the world we live in.**



Our Goals

Connect + Create + Collaborate

1

Build and sustain a network of advocates to provide equitable and inclusive STEM opportunities.

2

Catalyze equity in STEM from research to practice by providing actionable knowledge that transforms the STEM experience.

3

Increase our collective impact by strengthening organizational effectiveness and enhancing our fiscal sustainability.



NGCP Resources

- **National Webinars**

- Monthly on relevant topics, speakers include educators, researchers, authors, and diverse STEM professionals

- **Monthly Newsletter**

- National events, STEM resources for girls and youth, professional development opportunities for educators, and research and reports

- **NGCP Website**

- Exemplary Practices pages on Engaging Girls in STEM and Access and Equity, blog posts, and statistics and research related to girls and women in STEM



NGCP Podcast: Inspiring Curiosity from Early Childhood to Break Gender Stereotypes

In our first episode, we explore the crucial role of early childhood experiences in shaping girls' interest and engagement in STEM



5 Ways to Be an Ally to Girls and Women in STEM

If you think of gender equity in STEM as a “women’s issue” we encourage you to think again!

A FOCUS ON FINANCE FOR ENGAGING ELEMENTARY-AGED GIRLS

MAY 16, 2024

11:30 AM PT/2:30 pm ET



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Girls and Math

Girls/women and boys/men do not differ in mathematics ability, but research has shown...

- Teachers and parents often underestimate girls' math abilities.
- Parents talk more about spatial relations and use spatial language with boys than girls.
- Girls are hard on themselves. They self-assess lower than boys with similar math achievement.
- Teachers — who are predominantly women in early education and elementary schools — often have their own anxiety about math that they pass on to girls.

Source: The AAUW's ["Fast Facts: Early Barriers to Girls and Women in STEM"](#)



Early Exposure

- **Early exposure to hands-on math can....**
 - Build girls' STEM confidence and competence
 - Counter STEM stereotypes
- **Exploring mathematics concepts through the lens of finance can...**
 - Teach math concepts in concrete ways
 - Explore math with relatable real-world contexts
 - Help girls develop the skills necessary to achieve financial success later in life



Jackie Morgan

Outreach Senior Adviser

The Federal Reserve Bank of Atlanta –
Nashville Branch



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Federal Reserve Bank of Atlanta

Birmingham • Jacksonville • Miami • Nashville • New Orleans

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The views expressed are mine and not necessarily those of the Atlanta Fed or the Federal Reserve System.



Discussion Question...

Which is bigger –
a penny or a dime?



Discussion Question...

Which is bigger –
a penny or a dime?









PENNY

Value: 1 cent 1¢ \$0.01



DIME

Value: 10 cents 10¢ \$0.10

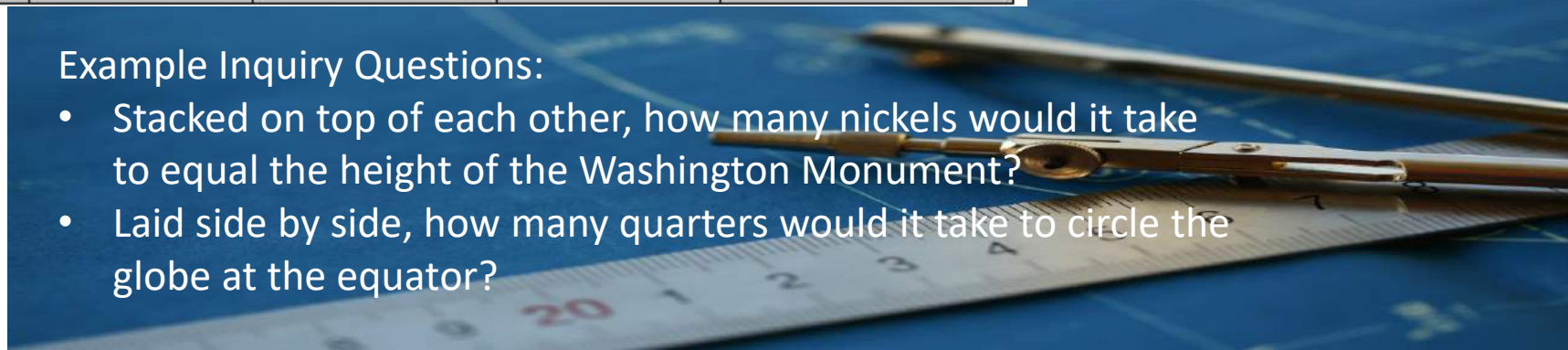
	Cent	Nickel	Dime	Quarter Dollar	Half Dollar	Dollar
Denomination						
Composition	Copper Plated Zinc 2.5% Cu Balance Zn	Cupro-Nickel 25% Ni Balance Cu	Cupro-Nickel 8.33% Ni Balance Cu	Cupro-Nickel 8.33% Ni Balance Cu	Cupro-Nickel 8.33% Ni Balance Cu	Manganese-Brass 88.5% Cu 6% Zn 3.5% Mn 2% Ni
Weight	2.500 g	5.000 g	2.268 g	5.670 g	11.340 g	8.1 g
Diameter	0.750 in. 19.05 mm	0.835 in. 21.21 mm	0.705 in. 17.91 mm	0.955 in. 24.26 mm	1.205 in. 30.61 mm	1.043 in. 26.49 mm
Thickness	1.52 mm	1.95 mm	1.35 mm	1.75 mm	2.15 mm	2.00 mm
Edge	Plain	Plain	Reeded	Reeded	Reeded	Edge-Lettering
No. of Reeds	N/A	N/A	118	119	150	N/A



Example Inquiry Questions:

- Stacked on top of each other, how many nickels would it take to equal the height of the Washington Monument?
- Laid side by side, how many quarters would it take to circle the globe at the equator?

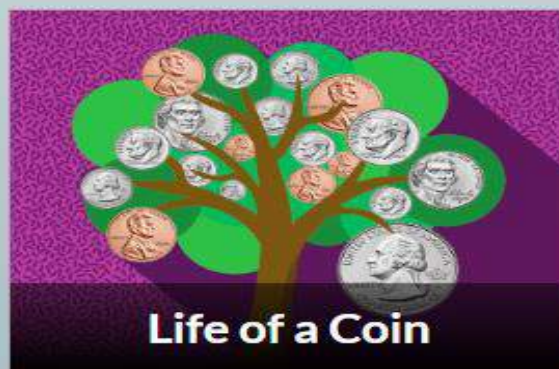
<https://www.usmint.gov/learn/coin-and-medal-programs/coin-specifications>





Games

Do you know the presidents? Play the Presidential Challenge game to find out!



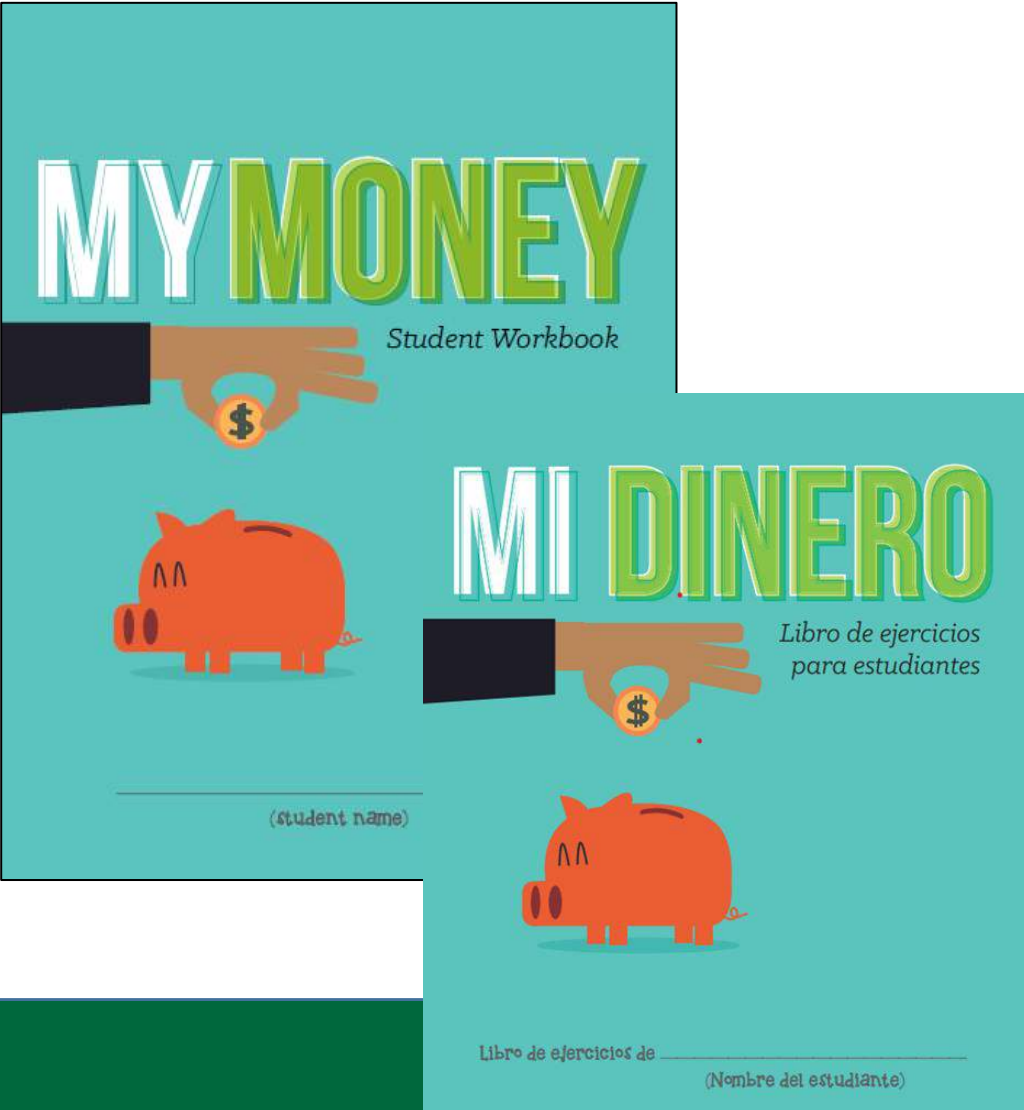
My Money

Educational workbook

Topics: Money, coin equivalents, jobs, goods, services, barter

PDF and print (no charge)

English & Spanish



My Money

Characteristics of Money

Money is used to buy **goods** and **services**.
 A **good** is a product that you can touch. A **service** is an activity someone does to satisfy a want or need for someone else.

Divisible

Money can be easily divided



Scarce

Money is limited in supply



Portable

Money is easy to carry around



Generally Accepted

Money can be used to buy goods and services



Durable

Money does not wear out easily

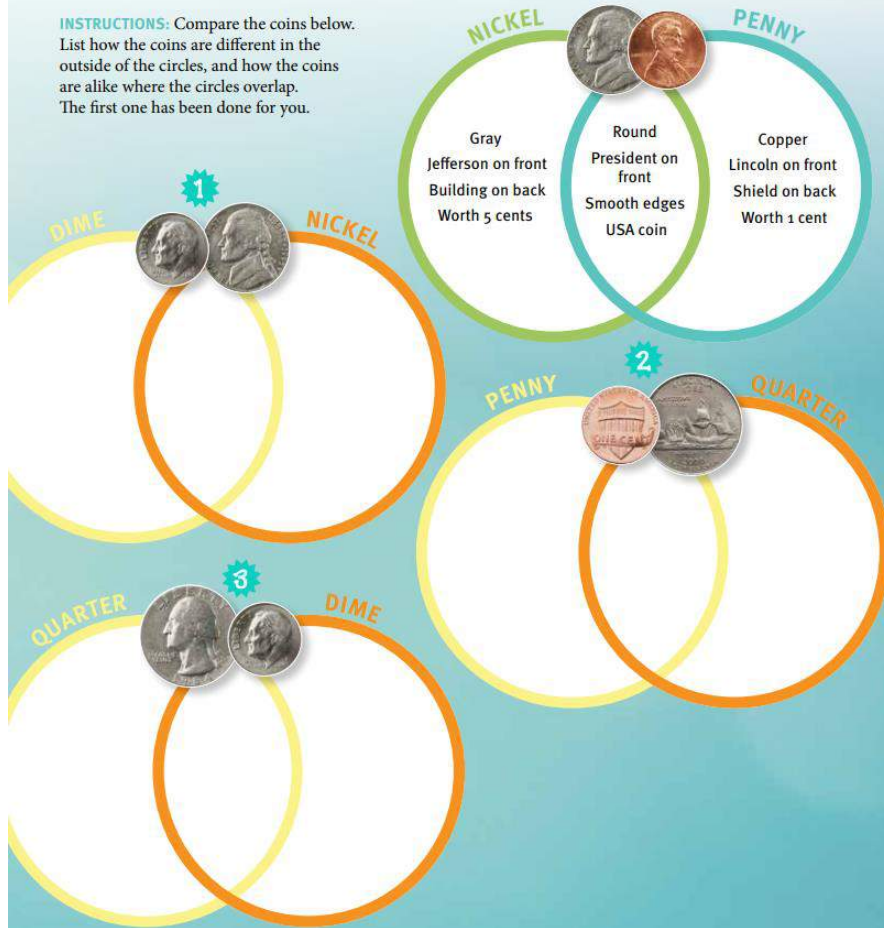


Item	Portable	Divisible	Durable	Scarce	Generally Accepted
Crayon/Marker	✓	✓ (but not evenly)	? (can break or melt)	X	X
Salt					
Chocolate					
Book					
Beads					
Desk					

My Money

Coin Comparison - Venn Diagrams

INSTRUCTIONS: Compare the coins below. List how the coins are different in the outside of the circles, and how the coins are alike where the circles overlap. The first one has been done for you.



Money Equivalents



5 Pennies (5 cents) = 1 Nickel (5 cents)

10 Pennies (10 cents) = 1 Dime (10 cents)

2 Nickels (10 cents) = 1 Dime (10 cents)

5 Pennies (5 cents) + 1 Nickel (5 cents) = 1 Dime (10 cents)

Discussion Question...

Is the one dollar bill
more like an oak tree
or a cotton plant?



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US Currency
(Bills/Notes)

75% Cotton | 25% Linen

That's why currency
doesn't dissolve if it
goes through the
washing machine

More Fun Facts About U.S. Currency

Seven Denominations Currently Printed



6.14 inches

2.61
inches



Perimeter = 17.5 inches
Area = 16.0254 square inches

Lifespan (From Entering Until
Removed From Circulation)
\$1 = 5.8 years \$100 = 15 years

Currently Featured on U.S. Currency

\$1	George Washington
\$2	Thomas Jefferson
\$5	Abraham Lincoln
\$10	Alexander Hamilton
\$20	Andrew Jackson
\$50	Ulysses S. Grant
\$100	Benjamin Franklin

Discussion Question...

How is our money
like animals in
nature?



ARMADILLO



The shell of the armadillo has a unique texture – it is rough to the touch with raised bumps.



Raised Texture

U.S. currency also has a distinctive feel because of its special paper and the way that it's printed. If you move your fingers across the shoulders of the people on the bills, you will notice a raised texture that feels like bumps and ridges.

JEWEL BUG



This is a jewel bug. But is it green or is it copper? It all depends on what angle you look at it.

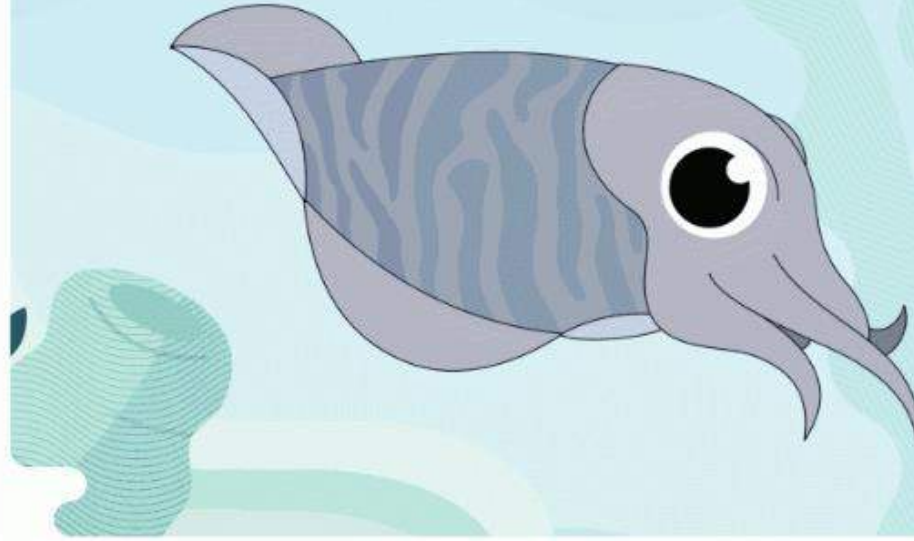
Color-Changing Ink

U.S. currency can also look green or copper because of color-changing ink. To see the colors change, all you have to do is tilt it from side to side.

Color-changing ink can be seen on bills worth \$10 or more. You can find the color-changing ink on the front of these bills, on the number in the lower-right corner.



CUTTLEFISH



Many animals have patterns on their skin. The cuttlefish can create any pattern it wants and can even make them move.

3-D Ribbon

\$100 bills have a special pattern on its 3-D Ribbon. When you tilt it in different directions, the pattern will move and change. The images on the ribbon are bells and little "100's".



JELLYFISH



Some jellyfish are actually hiding a secret. Take a look at this one against the light – you can see a school of fish hiding under its bell.



Watermarks

U.S. currency also hides some secrets! All bills with a value over \$5 have secret, hidden pictures on them that you can see if you hold a bill up to the light. These hidden pictures are called watermarks.



A watermark on a bill is usually the head of the person on the bill. But on the \$5 bill, it is a number. These watermark numbers are on both sides of the bill.

MILLIPEDE



This millipede looks normal until you hold it under an ultraviolet, or UV, light. Then it glows brilliantly.



Special Thread

When you also hold U.S. currency up to light, you'll also see a special thread hidden inside (in bills with a value of \$5 or more). The thread is a narrow strip running up and down the bill. You can see it from both the front and back sides.



You'd Be Surprised: Special Features



Money-Related Resources



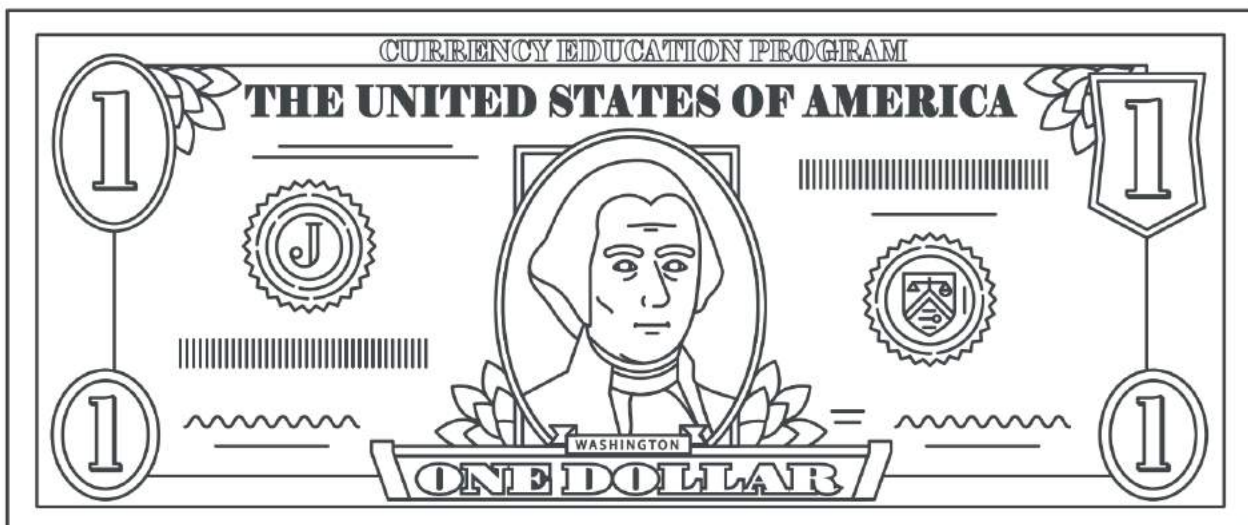
Currency Academy for Kids

Are you ready to have some fun and learn all about U.S. bills?



Lesson Plans

The Federal Reserve's Currency Education Program has created fun, engaging activities that will help students better understand the currency in their pockets.



Money Adventure Mobile App

The Money Adventure mobile app is here to teach the next generation of cash users about U.S. currency.



Carnival Thrills and Dollar Bills

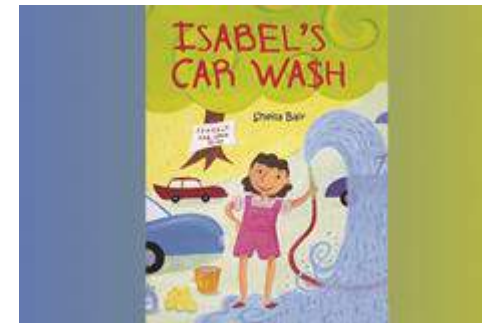
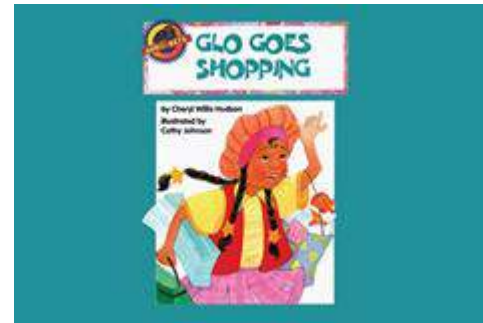
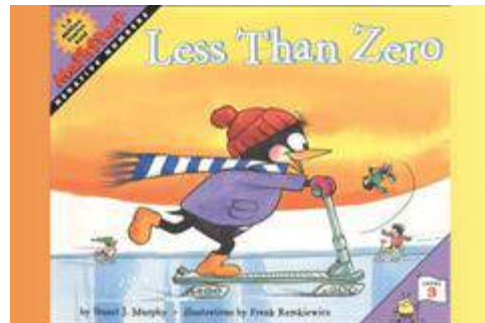
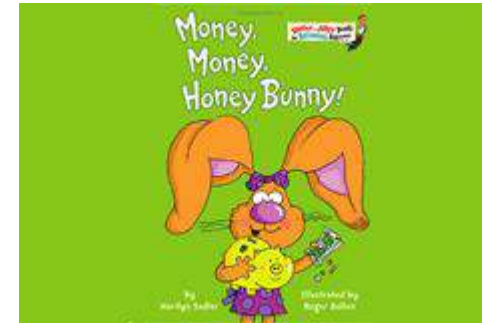
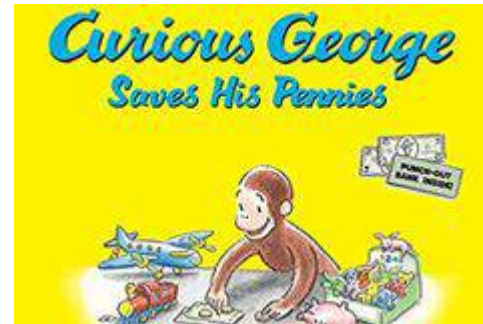
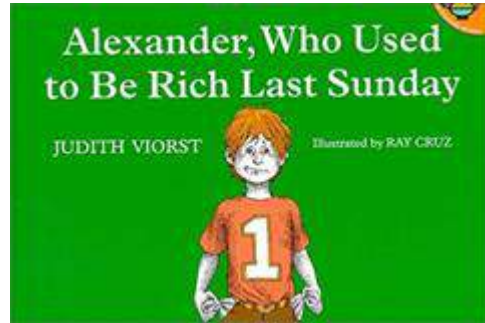
An illustrated book about U.S. currency for elementary students.

<https://www.uscurrency.gov/educational-materials/classrooms>

<https://www.uscurrency.gov/media/videos/you-d-be-surprised-special-features>

<https://www.uscurrency.gov/sites/default/files/downloadable-materials/files/en/play-money-coloring-sheets-en.pdf>

Money, Personal Finance, and Children's Literature



Lessons, Activities, and Q&A to Accompany Children's Literature – These And Many More!

E-Books, Videos, and Activities

Shopping Wisely with Olivia Owl

Olivia Owl and Penny Pigeon share valuable advice with Rhoda Roadrunner to improve her shopping habits in this fable. The story is centered on the moral: "If you plan and compare before shopping, you will use your money more wisely."



Teacher Resource: [Olivia Owl Lesson Plan](#)

Teacher Resource: [Olivia Owl Story Printout](#)

Alliteration Alert: [Create a tongue twister sentence by using an alliteration example from the fable.](#)
(Ages 5-7)

Answer Key: [Alliteration Alert](#)

Be Aware and Compare: [Choose the better shopping buy, using the measurement tips to compare prices.](#) (Ages 8-10)

Answer Key: [Be Aware and Compare](#)

[Olivia Owl Fable Coloring Pages](#)

Family Extension Activities: [Try these additional activities after reading the fable.](#)



Downloadable Workbook & Lessons

A NEW GUIDE TO MONEY

Everyone has a limited amount of money to spend. That's why we have to make choices about how to spend the money we have. Usually, that means choosing between things that we **need** and things that we **want**.

Other things are nice to have, but aren't necessary to survive, such as apps, candy, concert tickets, or a phone. We can do without these things, even though we might not want to.

Some things are necessary to survive, such as shelter, food, water, and clothes. These are things we absolutely can't do without.

I want it!

I NEED IT!

Let's Talk about it
How did you decide which needs and wants were important?
Write your answer on page 16.

What Are Your Needs and Wants?
First, write down five things that you need to survive and five things that you want, but could survive without. Next, rank the importance of each thing. Number them from 1 (most important) to 5 (least important).

Things I Need	Importance to Me (1-5)	Things I Want	Importance to Me (1-5)

WHAT'S THE PLAN?

Now that you know what you'd like to save money for, figure out how much you'll need to save each week and how long it will take to reach your goal.

The goal I want to save for is: _____

To reach my goal, I must figure out

- How much do I need to save? \$ _____
- How much do I have now? \$ _____
- How much more do I need? \$ _____
(Subtract the amount you have from the amount you need to save)

If I save...	I will reach my goal in this many weeks
\$2 a week	
\$5 a week	
\$10 a week	
\$15 a week	

EARNING MONEY

Think about jobs you could do to earn money. Figure out how much you could earn in one week and in one month.

My skills and talents are:

Three jobs that I could do to earn money using my skills and talents	Column A Amount I think someone would pay me for this job	Column B Amount earned by working one week	Column C Amount earned by working one month (Column B x 4)
1.			
2.			
3.			

GREAT MINDS THINK
A NEW GUIDE TO MONEY

Hi! My name is Momo, and I love money! Do you want to learn how to make smart choices about money too?

YES!

Accompanying Digital Game

Glossary

Needs Things that are necessary to survive

Wants Things that are nice to have, but aren't necessary to survive

Cool Fact

Want to know more about how much other jobs pay? Visit the Bureau of Labor Statistics at [bls.gov](https://www.bls.gov) and search for the Occupation Finder.

Flash Cards and Related Materials



Fifty Nifty
Econ Cards

Earn

To receive money for doing work.



Activities

Popcorn Economics
Econ Bingo



Fifty Nifty Word Search
Word Search Puzzle



Fifty Nifty Memory Game
Memory Game



Fifty Nifty Crossword Puzzle - Personal
Finance
Crossword Puzzle

Order Flash Card Sets Online

<https://www.kansascityfed.org/education/fifty-nifty-econ-cards/>



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Equipping Educators, Educating Students and Empowering Consumers



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Federal Reserve Bank *of* Atlanta

Birmingham • Jacksonville • Miami • Nashville • New Orleans

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