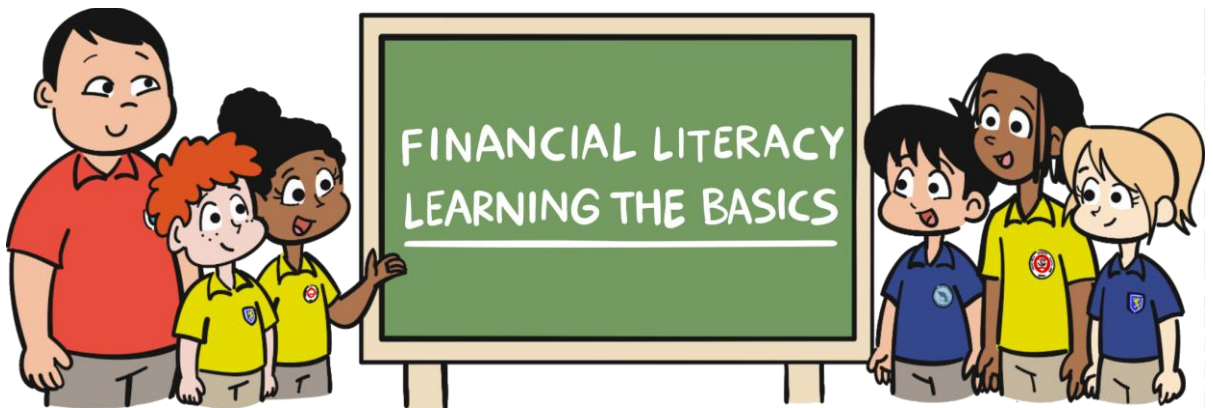




City Pay it Forward



This booklet includes the following:

- Lesson plan for Lesson 5
- Inter-curricular suggestions
- Activities and extension ideas
- Guided and Independent Practice
- Handouts

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Making a budget, trade-offs and beware of debt



Lesson Plan 5

Key Points

- Creating a budget is important when making a purchase decision
- Trade-offs are when one item is purchased to the exclusion of another
- When you borrow money from someone or a bank, it is called debt
- A debit card pulls money from the bank while a credit card is debt
- One spends real money in contactless payment transactions
- If not paid off monthly, credit card debt can create a debt trap
- Understanding how interest is calculated is important
- Different forms of debt have different costs/interest rates
- A big trade-off is time versus cost. Almost always, a purchase made with debt costs more, whereas, with time and a budget, the item will cost less

Content Objective	Language Objective
We will use knowledge of budgeting, trade-offs, and interest to mathematically calculate interest and create budgets that avoid debt.	Students will use definitions of key terms and mathematical calculations to explain how to avoid debt.

Activity	Suggested Time	Activity	Suggested Time
Do First/Lesson Opening	5 mins	Check for Understanding	
Lesson, Part 1	10 mins	Video	5 mins
Check for Understanding		Independent Practice	20 mins
Guided Practice	10 mins	Extension Work	Optional
Lesson, Part 2	10 mins	Handouts	Optional
Total Lesson time: 60 minutes			

Making a budget, trade-offs and beware of debt



Do First/Lesson Opening (5 minutes)

What do you do when you want to buy something, but you can't afford it just yet?

- The teacher will prompt students to silently reflect and write four complete sentences **to connect spending money on a new purchase with having enough money saved in advance**
- The teacher will put on a timer for three minutes and monitor students' writing. The teacher will positively reinforce students' usage of appropriate grammar conventions
- The teacher will ask students to build on one another's ideas in order to facilitate a discussion

In-class Slides (Part 1 and Part 2 - 10 minutes each)

Part 1 (slides 2 through 8)

- An important part of a purchase decision is having the requisite money
- How fast a budget achieves its goal depends on whether money is spent on other things as opposed to being saved entirely for the purchase
- All budgets are good, but the best budgets are those where there is focus
- A trade-off is when one item is purchased to the exclusion of another
- Importantly, a key element of a trade-off is that both items cannot be purchased, so a decision is required
- Trade-offs come in many forms. Not spending money and keeping the money in the bank can also be a trade-off to consider

Part 2 (slides 10 to 22)

- While operating in a similar manner, a debit card is limited by the money in a bank account, while a credit card is a form of debt
- Shopping around for the best credit card deals can yield savings
- Technology has made payments and spending easier. Just because you don't touch actual cash doesn't make spending money any less real
- If not paid off monthly, credit card debt can accumulate quickly
- Understanding the mathematical calculation of interest is important
- Different forms of debt and costs/interest rates are to be considered
- A big trade-off is time versus cost. Almost always, a purchase made with debt costs more whereas, with time and a budget, the item will cost less

Making a budget, trade-offs and beware of debt



Guided Practice (10 minutes)

- ❑ **Using the worksheet provided**, the teacher will ask students to explore:

**What is a budget? What is a trade-off?
Provide three examples of a trade-off**

- ❑ Students should write three to four sentences in response to the prompt and include a clear definition of both a budget and a trade-off. Students should provide three examples of different types of trade-offs

Model response

A budget is a tool that can be used when you want to make a purchase and do not have enough money to buy it. A trade-off is when you only have enough money to buy one item and not the other. You however cannot buy both. A trade-off is also deciding not to buy something and keeping the money in your wallet or a bank account.

Independent Practice (20 minutes)

- ❑ **Using the worksheet provided**, students will be asked to do mathematical calculations for interest in different scenarios. It is important that they include the original amount borrowed (the “principal”) in the repayment in addition to the interest cost
- ❑ Emphasis should be made to highlight the high interest rates associated with credit card debt. Students should describe the importance of being careful when taking on any debt, especially with credit cards if they are not paid off in full each month
- ❑ If laptop computers are available, the teacher may ask students to shop around and compare the Annual Percentage Rate (APR) on different credit card deals
- ❑ The teacher should provide time for students to turn and talk with their shoulder partner about why it is good to be cautious with debt
- ❑ A class discussion should follow to compare their findings on credit cards and their thoughts on credit card debt

Making a budget, trade-offs and beware of debt

Practice Worksheets (For use in lessons)

Please separately **print out** these Practice Worksheets to use in class for the Guided and Independent Practice:

(included in this file – See Page 9)

Lesson 5 **GUIDED PRACTICE**

A budget is an important tool when making a purchasing decision. Being diligent each week and finding ways to earn a little more money can speed things along.

When buying something, you should always consider what is the trade-off being made.

What is a budget?

What is a trade-off? Provide three examples

Guided Practice

Lesson 5 **INDEPENDENT PRACTICE**

Calculate interest on a loan or credit card. If you pay off the loan in full after one year, what is the total amount due at the end? Don't forget to include in the calculation the original amount you borrowed (called the "principal").

For example, if you borrow \$50.00 and the interest rate is 5%, you will pay \$2.50 in interest expense per year and repay \$52.50 at the end of the loan (\$50.00 in principal + \$2.50 in interest).

You borrow \$100. Calculate interest and the amount to repay after one year.

Type of Debt	Amount Borrowed	Interest Rate (APR)	Interest Cost	Total Amount to Repay after One Year
Bank loan #1	\$100	5%		
Bank loan #2	\$100	10%		
Bank loan #3	\$100	15%		
Credit card	\$100	15%		

* Don't forget the original amount borrowed

The Annual Percentage Rate ("APR") is the rate of interest charged each year

Why is it important to be extremely careful when taking on debt? Why do you need to be wary of credit card debt?

Independent Practice

Handouts (Optional)

The following are three optional Handouts which can be reviewed and discussed in class or can be assigned as homework assignments to extend the learning:

(included in this file – See Page 9)

Lesson 5 **HANDOUT**

Difference between debit and credit cards

Money comes from: **Credit card** (from a bank) vs **Debit card** (from your bank account)

Feature	Credit card	Debit card
Can you use it before you have the money?	Yes	No
Can you use it after you have the money?	No	Yes
Can you use it to buy things you don't have the money for?	Yes	No
Can you use it to buy things you do have the money for?	No	Yes
Can you use it to buy things you don't have the money for and you don't have the money to pay for them?	Yes	No
Can you use it to buy things you do have the money for and you don't have the money to pay for them?	No	Yes

Activity
Credit cards are very easy to use. However, they are very expensive to use if the money is not paid in full by the end of the month. Discuss the importance of always paying back debt promptly.

Did you know?
The first universal credit card, which could be used at a variety of establishments, was introduced by the Diners Club, Inc., in 1950. A travel and entertainment card was established by the American Express Company in 1958.

Lesson 5 **HANDOUT**

Trade-off between making a budget and using debt

Need \$1,000 for a moped

BUDGET
Create a budget, use money and do extra work to spend it up

DEBT
Apply for a bank loan or use a credit card to buy the moped

Can buy it now
 Interest to be paid
 Cost more than \$1,000

Will cost \$1,000
 No interest to be paid
 Will take a few months

Activity
Rainy day funds are meant for special things. What sort of purchases would you consider spending your rainy day funds on?

Did you know?
Everyone needs to do a budget, even the US Government. The federal budget for 2022 was set at over four trillion dollars (yes, that is a trillion with twelve zeros)

Lesson 5 **HANDOUT**

Making a budget

You decide you want to buy a scooter. You find a store that sells one for \$50.

Which type of budget would you choose from the examples below:

Example 1:
Saw allowance week 1: \$10
Saw allowance week 2: \$10
Saw allowance week 3: \$10
Saw allowance week 4: \$10
Saw allowance week 5: \$10
Buy scooter after 5 weeks: \$50

Example 2:
Saw allowance week 1: \$10
Saw allowance week 2: \$10
Saw allowance week 3: \$10
Saw allowance week 4: \$10
Saw allowance week 5: \$10
Buy scooter after 10 weeks: \$100

Example 3:
Saw allowance week 1: \$10
Saw allowance week 2: \$10
Saw allowance week 3: \$10
Saw allowance week 4: \$10
Saw allowance week 5: \$10
Buy scooter after 10 weeks: \$100

Example 4:
Saw allowance week 1: \$5
Saw allowance week 2: \$5
Saw allowance week 3: \$5
Saw allowance week 4: \$5
Saw allowance week 5: \$5
Buy scooter after 10 weeks: \$100


Activity
Can you list three things that can delay achieving your goal in a budget (such as the occasional candy purchase)? What about three things that can accelerate achieving your goal?

Did you know?
A budget is just another word for making a game plan. As with sports, a good game plan is key to achieving success quickly. Stick with the plan and think of ways to speed up the timetable.

Making a budget, trade-offs and beware of debt



Video (5 minutes)

- The video, embedded in the PowerPoint slide presentation, will start automatically when you get to Slide 23
- Make sure Slide Show mode (this icon ) on PowerPoint is used to access the video
- The video can be used to extend the learning in the lesson and as instructions for students to set up the Independent Practice

Activities including debate and discussion ideas (Optional)

The following are additional activities (optional) including extension ideas for homework assignments or an in-class debate:

- Describe the trade-off between flexibility and speed when creating a budget
- One of the biggest trade-offs is not making the purchase and to keep the money in the bank. Discuss when a purchase is important enough to take money out of the saving account to buy something
- Despite being one of the most expensive forms of debt, why do so many people choose to make purchases with credit cards?
- A credit card is a form of debt and must be treated with caution. The minimum age for a credit card is eighteen. Is that the right age?
- Savvy consumers always shop around for the best deals. Credit card companies offer deals to attract new customers. The same is true for banks when seeking to acquire new savers. Do some research to compare what different banks offer in terms of savings rates as well as what they offer in terms of credit cards
- Many credit card companies offer rewards such as air miles or even cash back deals to attract new customers. What is more important in the decision to choose one credit card over another, the rate of interest or the rewards being offered?
- Students should do the calculation to see how long it takes to pay off a credit card balance with a 25% interest rate when only the minimum payment is made each month. For example, a \$2,000 credit card balance at a 20% interest rate would take almost thirty years to repay with a minimum monthly payment of \$10

Making a budget, trade-offs and beware of debt



Lesson Plan 5

Inter-curricular Connections and Suggestions

The following are inter-curricular connections and suggestions which extend the learning to other subjects:

	Florida Standard	Application
<p>Slides #4 and # 5</p> <p>Mathematics MAFS.4.MD.1.2</p>	<p>Use the four operations to solve problems involving distances, intervals of time, and money, including problems involving simple fractions or decimals</p>	<p>Multiple slides ask students to use the four operations to consider the usage of money</p>
<p>Slide #9</p> <p>English Language Arts LAFS.5.L.3.6</p>	<p>Acquire and use accurately general academic and domain-specific words and phrases as found in grade level appropriate texts, including those that signal contrast, addition, and other logical relationships</p>	<p>Content-specific vocabulary will be introduced to students throughout the curriculum</p>
<p>Slide #12</p> <p>Mathematics MAFS.6.NS.3.5</p>	<p>Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (eg. credits/debits); use positive and negative numbers to represent quantities in real-world contexts, explaining the value of 0 in each situation</p>	<p>Teachers can introduce a balance on a credit card as a negative number as opposed to a balance on a debit card as a positive number</p>

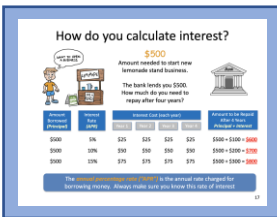
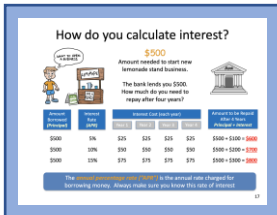

Making a budget, trade-offs and beware of debt



Lesson Plan 5

Inter-curricular Connections and Suggestions

The following are inter-curricular connections and suggestions which extend the learning to other subjects:

	Florida Standard	Application
 <p>Slide #17 Mathematics MAFS.4.NBT.2.4</p>	<p>Fluently add and subtract multi-digit whole numbers using the standard algorithm</p>	<p>Addition, subtraction, and multiplication with percentages (can be written as decimals to the hundredths) will be used to model how interest accrues</p>
 <p>Slide #17 Mathematics MAFS.4.MD.1.2</p>	<p>Use ratio and rate reasoning to solve real-world and mathematical problems</p>	<p>Standard can be applied to calculating interest accrued with different interest rates and principal sums</p>
 <p>Slide #19 English Language Arts LAFS.5.SL.1.1</p>	<p>Engage effectively in a range of collaborative discussions with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly</p>	<p>Content-specific vocabulary will be introduced to students throughout the curriculum</p>

Making a budget, trade-offs and beware of debt



Lesson Plan 5

Inter-curricular Connections and Suggestions

The following are inter-curricular connections and suggestions which extend the learning to other subjects:

	Florida Standard	Application
<p>Slide #20 English Language Arts LAFS.5.L.3.6</p>	<p>Acquire and use accurately general academic and domain-specific words and phrases as found in grade level appropriate texts, including those that signal contrast, addition, and other logical relationships</p>	<p>Some of the checks for understanding may be implemented as turn-and-talks where students can posit, justify, and persuade one another of their own ideas</p>
<p>Slide #21 English Language Arts LAFS.5.SL.2.4</p>	<p>Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace</p>	<p>Debt can be problematic if not managed responsibly. Being able to explain why it is important to be careful when taking on debt is a key life skill</p>
<p>Slide #24 English Language Arts LAFS.5.L.1.2</p>	<p>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing</p>	<p>Many of the questions posed throughout the curriculum can be turned into writing or discussion prompts where teachers will have an opportunity to teach the conventions of English writing</p>

Making a budget, trade-offs and beware of debt



How to use the Practice Worksheets and Handouts

Practice Worksheets

Lesson 5 **GUIDED PRACTICE**

A budget is an important tool when making a purchasing decision. Being diligent each week and finding ways to earn a little more money can speed things along.

When buying something, you should always consider what is the trade-off being made.

What is a budget?

What is a trade-off? Provide three examples

Guided Practice
(10 mins)
In-class

Lesson 5 **INDEPENDENT PRACTICE**

Calculate interest on a loan or credit card. If you pay off the loan in full after one year, what is the total amount due at the end? Don't forget to include in the calculation the original amount you borrowed (called the "principal").

For example, if you borrow \$50.00 and the interest rate is 5%, you will pay \$2.50 in interest expense per year and repay \$52.50 at the end of the loan (\$50.00 in principal + \$2.50 in interest).

You borrow \$100. Calculate interest and the amount to repay after one year.

Type of loan	Amount borrowed	Interest Rate (APR)	Interest Cost	How much do you have after one year?
Bank loan #1	\$100	5%	_____	_____
Bank loan #2	\$100	10%	_____	_____
Bank loan #3	\$100	15%	_____	_____
Credit card	\$100	25%	_____	_____

*** Don't forget the original amount borrowed**

The **Annual Percentage Rate ("APR")** is the rate of interest charged each year

Why is it important to be extremely careful when taking on debt? Why do you need to be wary of credit card debt?

Independent Practice
(20 mins)
In-class with video

Handouts (3 per lesson)

Handouts
(Optional)
In-class or Homework

Lesson 5



GUIDED PRACTICE

A budget is an important tool when making a purchasing decision. Being diligent each week and finding ways to earn a little more money can speed things along.

When buying something, you should always consider what is the trade-off being made.



What is a budget?

What is a trade-off? Provide three examples

Lesson 5



INDEPENDENT PRACTICE

Calculate interest on a loan or credit card. If you pay off the loan in full after one year, what is the total amount due at the end? Don't forget to include in the calculation the original amount you borrowed (called the "principal").

For example, if you borrow \$50.00 and the interest rate is 5%, you will pay \$2.50 in interest expense per year and repay \$52.50 at the end of the loan (\$50.00 in principal + \$2.50 in interest).

You borrow \$100. Calculate interest and the amount to repay after one year.

Type of Debt	Amount Borrowed	Interest Rate (APR)	Interest Cost	How much do you repay after one year *
Bank loan #1	\$100	5%	_____	_____
Bank loan #2	\$100	10%	_____	_____
Bank loan #3	\$100	12%	_____	_____
Credit card	\$100	25%	_____	_____



* Don't forget the original amount borrowed

The **A**nual **P**ercentage **R**ate ("APR") is the rate of interest charged each year

Why is it important to be extremely careful when taking on debt? Why do you need to be wary of credit card debt?



Difference between debit and credit cards

Money comes from:
A pre-agreed amount a bank is willing to lend you
"Debt"



Credit card



Debit card



Money comes from:
Directly from your bank account

Things to know	Debit cards	Credit cards
Contactless?	Yes	Yes
Form of Debt?	No	Yes
Money comes from where?	Bank account	Bank credit limit
Maximum that can be spent	Amount in bank account	Up to pre-agreed credit limit
Need to pay back?	\$\$ in account	Yes
Minimum age	11 yrs	18 yrs

Credit and debit cards look very similar and the way a consumer uses them to pay at the cash register is the same. But, what happens behind the scenes is very different! A debit card pulls money directly from your bank account. However, a credit card uses money that the bank lends you up to a pre-agreed amount.



If you borrow money using a credit card, don't forget that you always have to pay back the amount borrowed plus interest

Activity

Credit cards are very easy to use. However, they are very expensive to use if the money is not paid in full by the end of the month. Discuss the importance of always paying back debt promptly.

Did you know?

The first universal credit card, which could be used at a variety of establishments, was introduced by the Diners Club, Inc., in 1950. A travel and entertainment card was established by the American Express Company in 1958



Trade-off between making a budget and using debt

Need \$1,000 for a moped



Create a budget, save money and do extra work to speed it up

- Will cost \$1,000 ✓
- No interest to be paid ✓
- Will take a few months ✗



Apply for a bank loan or use a credit card to buy the moped

- Can buy it now ✓
- Interest to be paid ✗
- Cost more than \$1,000 ✗



Saving for a “rainy day” means you put money aside for unexpected expenses

Activity

Rainy day funds are meant for special things.

What sort of purchases would you consider spending your rainy day funds on?

Did you know?

Everyone needs to do a budget, even the US Government. The federal budget for 2022 was set at over four trillion dollars (yes, that is a trillion with twelve zeros)



Making a budget

You decide you want to buy a scooter.
You find a store that sells one for \$50.



Which type of budget would you choose from the examples below:

Example 1:

Save allowance week 1	\$10
Save allowance week 2	\$10
Save allowance week 3	\$10
Save allowance week 4	\$10
Save allowance week 5	\$10
Buy scooter after 5 weeks	\$50

Example 2:

Save allowance week 1	\$10
Save allowance week 2	\$10
Save allowance week 3	\$10
Save allowance week 4	\$10
Do extra chores	+\$10
Buy scooter after 4 weeks	Faster

Example 3:

Save allowance week 1	\$10
Save allowance week 2	\$10
Save allowance week 3	\$10
Purchase of candy	-\$10
Save allowance week 4-6	\$10
Buy scooter after 6 weeks	Slower

Example 4:

Save ½ allowance week 1	\$5
Save ½ allowance week 2	\$5
Save ½ allowance week 3	\$5
Save ½ allowance week 4	\$5
Save ½ allowance 5-10 weeks	\$5
Buy scooter after 10 weeks	Slower

Activity

Can you list three things that can delay achieving your goal in a budget (such as the occasional candy purchase)? What about three things that can accelerate achieving your goal?

Did you know?

A budget is just another word for making a game plan. As with sports, a good game plan is key to achieving success quickly. Stick with the plan and think of ways to speed up the timetable