

## Module 2: Loans and Credit Cards

### Teaching Notes:

The PowerPoint presentation for this module is short because this module is interactive and focuses on learning to use the MyFi Assist app. We encourage you to study the examples thoroughly. Module 2 breaks down the different components that make up an interest rate, which are time, inflation, and risk. It is important to stress to your students that time and inflation are the same for everyone; it is the risk component that varies from person to person. In this module we don't break down a credit score (see module 4 for more detail about credit scores), but it should be emphasized that credit scores have a big effect on the risk component of an interest rate. Module 2 introduces MyFi Assist, a free financial assistant app. If possible, encourage your students to download the app. MyFi Assist will be used throughout the Money Management Modules and can be a great resource for your students' personal finances. Using MyFi Assist, we have created several examples to show the effects of different interest rates on credit cards, vehicle loans, and home loans. Encourage your students to come up with their own examples as well. The big takeaway from this module is that interest rates have a big effect on how much you have to pay back, which in turn has an effect on how much you have to work to pay that money back. Someone who buys everything on credit will have to work more than someone who saves and then pays cash for the same items.

### Educational Objectives:

- Understand the components of an interest rate
- Understand the relationship between your credit score and interest rates
- Learn how to use MyFi Assist to make money management decisions
- Understand the effects of time and interest rates

### Discussion Topics:

- Why do we make choice to pay for to have something now?
- What is interest?
- What are interest rates?
- Risk is the factor that affects a person's individual rate. How does knowing this affect you? What does it make you think?
- How are you affected by interest rates, credit cards and loans?

### Resources:

- **Worksheets:**
  - a. **MyFi Assist Worksheet** – This worksheet will help your students become more comfortable using the features that the MyFi Assist app has. It has additional examples that the presentation does not cover. Using this worksheet will help your students understand loans and credit better by covering concepts like: the negative effects of over using credit, the overall impact of an interest rate on the total amount owed on a loan, only paying the minimum payment means it will

take more money and time to pay that loan off, and the sooner you start saving the better off you will be in the long run.

- **Other:** MyFi Assist app

**Outline:**

1. Components of an Interest Rate
  - a. Time
  - b. Inflation
  - c. Risk
2. Credit Score vs. Interest Rate
3. MyFi Assist
  - a. Example 1 – Purchase a Pickup for \$30,000
  - b. Example 2 – Pay off a Credit Card with a \$1,800 balance
  - c. Example 3 – Table Comparing Interest Rates and Hours Worked
4. Paying Credit Cards
5. Paying for House Loans
6. Take-Home Message
7. Money Management Module Review
  - a. Module 1: Record Keeping
    - i. Keep track of your income and expenses
    - ii. A good set of financial records will help you build a budget and make better financial choices
  - b. Module 2: Loans and Credit
    - i. Use MyFi Assist to become more savvy about credit card usage
    - ii. Build a budget that will help you become free from credit cards for unexpected expenses
8. Reminder to Keep Track of your Budgeting Exercise

## Money Management Module 2: MyFi Assist Worksheet

Download *MyFi Assist* from



OR



Learn how to examine different financial situations, such as

- Paying off credit cards
- Applying for loans
- Investing in a savings fund

**Personal Preferences:** Before using *MyFi*, set up your personal preferences. Your personal preferences can be anything that has meaning for you, as well as a monetary value. *MyFi Assist* will translate the monetary value of loan payments, interest rates, and savings into a value of your personal preference. If you like to look at your spending in terms of how many hours you work use “Hours Worked” and setting the value to your hourly pay rate. For this worksheet we are using “Head of Cattle” and setting the value to \$1,000.

**Using Credit:** Credit is a tool, just like a drill is a tool. If you know how to use a tool correctly, you can do things that you would not be able to do without the tool. However, used incorrectly, you can get hurt. Anytime you use a tool, you should first understand how the tool works to use it safely. Credit is the same.

### Example 1:

Jake and George both have cow-calf operations. They each buy feed for \$4,000. George pays cash for the feed, while Jake buys it with credit and then pays it off. Each head of cattle can be sold for \$1,000.

How many head of cattle did George have to sell to earn enough to pay for the feed?

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If Jake used a credit card with 18% interest to buy the feed and it took him 1 year to pay off the credit card, how much did he end up paying? \_\_\_\_\_.

How many head of cattle did Jake have to sell to pay for the feed? \_\_\_\_\_

**Note:** Use the “**Paying for a Loan**” to answer the second question. Make sure your personal settings were set to # of Cattle and \$1,000/Cattle.

If Jake and George sell the same number of cattle, but Jake always buys feed on credit, can they purchase the same amount of feed? Yes or No

## Money Management Module 2: MyFi Assist Worksheet

When would credit be a useful tool?

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### How does the interest rate affect your payment?

Interest is what you pay someone (i.e., a bank) for using their money. It is set based on time, inflation, and risk. Time and inflation are the same for everyone, but risk may change.

#### Example 2:

Assume you purchase a truck for \$15,000 with no down payment. Use “Paying for a Loan” to fill in the table.

Fico Score	APR	Monthly Payment	Total Head of Cattle	Total Paid	Interest Paid
720-850	3.5 %				
690-719	4.9 %				
660-689	7.4 %				
620-659	10.1 %				
590-619	16.4 %				
500-589	18.3 %				

Source: <http://www.myfico.com/myfico/creditcentral/loanrates.aspx> (Utah 48 month used auto loans.)

**Minimum Payments:** Making the minimum payment may save you money in the short term, but in the end you will pay hundreds more than the original loan amount. Also, making just the minimum payment on unsecured loans, like credit cards, could raise a red flag for lenders; it may show that you are not capable of taking on additional loan payments. If you can pay more than the minimum payment, do it.

#### Example 3:

Assume you want to pay off a \$5,000 credit card balance that has a 12% interest rate. Use “Pay Off Credit Card” to fill in the table.

Monthly Payment	Total Paid	Interest Paid	Total Head of Cattle	Time to Pay off Balance
\$100				
\$150				
\$200				
\$250				

## Money Management Module 2: MyFi Assist Worksheet

**Savings:** The more time you have, the more your money will grow. Find out how much you would have to save each month to become a millionaire by the time you are 65 if you start saving when you are:

Start Saving at	Earn 7% interest		Earn 10% interest	
	Interest Earned	# of Cattle / year	Interest Earned	# of Cattle / year
15 years old				
25 years old				
35 years old				
45 years old				

**Note:** Use the “**Savings Payment**” to calculate the answers. Assume you have nothing saved now and you will need \$1 million.

What effect do interest rate and time have on the amount you need to save each month? What does this tell you about saving for retirement?

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- Paying off credit cards
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**Personal Preferences:** Before using *MyFi*, set up your personal preferences. Your personal preferences can be anything that has meaning for you, as well as a monetary value. *MyFi Assist* translates loan payments, interest rates, and savings into a value that has significance to you, through your personal preferences. If you like to look at your spending in terms of how many hours you work use “Hours Worked” and set the value to your hourly rate. In this worksheet we are using “Head of Cattle” and setting the value to \$1,000.

**Using Credit:** Credit is a tool, just like a drill is a tool. If you know how to use a tool correctly, you can do things that you would not be able to do without the tool. However, used incorrectly, you can get hurt. Anytime you use a tool, you should first understand how the tool works to use it safely. Credit is the same.

### Example 1:

Jake and George both have cow-calf operations. They each buy feed for \$4,000. George pays cash for the feed, while Jake buys it with credit and then pays it off. Each head of cattle can be sold for \$1,000.

How many head of cattle did George have to sell to earn enough to pay for the feed? **4 Head of Cattle**

If Jake used a credit card with 18% interest to buy the feed and it took him 1 year to pay off the credit card, how much did he end up paying? **\$4,400.**

How many head of cattle did Jake have to sell to pay for the feed? **4.4 Cattle so 5 Cattle**

**Note:** Use the “**Paying for a Loan**” to answer the second question. Make sure your personal settings were set to # of Cattle and \$1,000/Cattle.

If Jake and George sell the same number of cattle, but Jake always buys feed on credit, can they purchase the same amount of feed? Yes or **No**

When would credit be a useful tool?

**When you want to buy a house or invest in large equipment when investing in your business.**

## Money Management Module 2: MyFi Assist Worksheet

### How does the interest rate affect your payment?

Interest is what you pay someone (i.e., a bank) for using their money. It is set based on time, inflation, and risk. Time and inflation are the same for everyone, but risk may change.

#### Example 2:

Assume you purchase a truck for \$15,000 with no down payment. Use “Paying for a Loan” to fill in the table.

Fico Score	APR	Monthly Payment	Total Head of Cattle	Total Paid	Interest Paid
720-850	3.5 %	\$335	16.1	\$16,096	\$1,096
690-719	4.9 %	\$344	16.5	\$16,549	\$1,549
660-689	7.4 %	\$362	17.4	\$17,375	\$2,375
620-659	10.1 %	\$381	18.3	\$18,296	\$3,296
590-619	16.4 %	\$428	20.6	\$20,553	\$5,553
500-589	18.3 %	\$443	21.3	\$21,263	\$6,263

Source: <http://www.myfico.com/myfico/creditcentral/loanrates.aspx> (Utah 48 month used auto loans.)

**Minimum Payments:** Making the minimum payment may save you money in the short term, but in the end you will pay hundreds more than the original loan amount. Also, making just the minimum payment on unsecured loans, like credit cards, could raise a red flag for lenders; it may show that you are not capable of taking on additional loan payments. If you can pay more than the minimum payment, do it.

#### Example 3:

Assume you want to pay off a \$5,000 credit card balance that has a 12% interest rate. Use “Pay Off Credit Card” to fill in the table.

Monthly Payment	Total Paid	Interest Paid	Total Head of Cattle	Time to Pay off Balance
\$100	\$6,933	\$1,966	7	70 months
\$150	\$6,112	\$1,112	6.1	41 months
\$200	\$5,782	\$782	5.8	29 months
\$250	\$5,607	\$607	5.6	22 months

## Money Management Module 2: MyFi Assist Worksheet

**Savings:** The more time you have, the more your money will grow. Find out how much you would have to save each month to become a millionaire by the time you are 65 if you start saving when you are:

Start Saving at	Earn 7% interest		Earn 10% interest	
	Interest Earned	# of Cattle / year	Interest Earned	# of Cattle / year
15 years old	<b>\$889,869</b>	<b>2/year</b>	<b>\$965,367</b>	<b>1/year</b>
25 years old	<b>\$817,130</b>	<b>5/year</b>	<b>\$924,100</b>	<b>2/year</b>
35 years old	<b>\$704,911</b>	<b>10/year</b>	<b>\$840,742</b>	<b>5/year</b>
45 years old	<b>\$539,283</b>	<b>23/year</b>	<b>\$683,948</b>	<b>16/year</b>

**Note:** Use the “**Savings Payment**” to calculate the answers. Assume you have nothing saved now and you will need \$1 million.

What effect do interest rate and time have on the amount you need to save each month? What does this tell you about saving for retirement?

**The higher the interest rate and the longer amount of time you have to save, the less you have to invest each month. The sooner you start saving for retirement the better.**



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