

# Money Math for Teens

Before You Choose a Credit Card



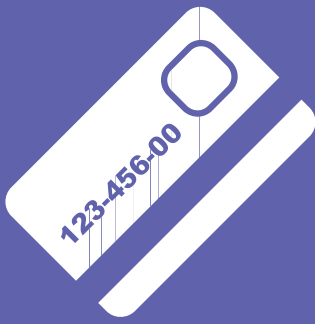


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# Before You Choose a Credit Card

## Lesson Plan

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### OBJECTIVE

To inform students about the subtle and not-so-subtle differences between credit cards and how to choose the right card for their individual needs.

Students will be able to:

- ▶ Identify different types of credit cards
- ▶ Evaluate the differences between credit offers
- ▶ Understand typical fees associated with credit accounts
- ▶ Calculate the minimum monthly payment required on a credit card
- ▶ Determine how to avoid finance charges.

### TEACHING MATERIALS

- ▶ Lesson plan with answer key for student assessment
- ▶ Before You Choose a Credit Card student handout
- ▶ Student assessment worksheet

### LESSON ACTIVITY

- 1. Informally assess students' prior knowledge through a group discussion. Ask:**
  - How many different types of credit cards are there?
  - What horror stories have you heard about credit cards?
  - What kinds of behavior do you think could lead to financial trouble?
  - Are you aware of rewards programs? What kinds of programs have you heard of?
- 2. Present the student handout through the Credit Card Fees section, continuing the discussion with the following questions:**
  - How can a credit card be a useful tool?
  - How can someone's spending habits influence their choice of card?
  - What are the different kinds of interest rates that can be attached to a credit card?
  - What is a credit limit?
  - What is a grace period?
  - How many fees are students already aware of?
  - What are some different types of credit cards?
  - How can prospective cardholders decide which type of account is best for them?



## Before You Choose a Credit Card

3. **Finance charges (see student handout):**
  - How does the grace period affect the finance charge?
  - What is the difference between the billing date and the payment due date?
  - Typical minimum monthly payment due is 2% of balance.
    - Walk through how to calculate 2% of a balance.
  - Calculate a year's worth and a month's worth of interest.
    - $\text{Balance} \times \text{interest rate} = \text{annual interest}$
    - $(\text{Balance} \times \text{interest rate})/12 = \text{one month of interest}$
  - Finance charges on balance transfers:
    - A balance transfer fee is an upfront, one-time percentage-based fee.
    - The APR of the card offering a balance transfer may be lower than the original card's APR, but the new APR combined with the balance transfer fee may be higher than the original card's APR, so a transfer is not always a good deal.
4. **Rewards and incentives programs (see student handout):**
  - Discuss different types of rewards and the factors that can make one more useful than another.
  - How do cardholders' spending habits influence the rewards programs they choose?
5. **Evaluate students' comprehension (see assessment worksheet).**

### Assessment Answer Key

1. A
2. C
3. D
4. B
5. B
6. A
7. C
8. D
9. D
10. D



## Before You Choose a Credit Card

### Student Handout: Before You Choose a Credit Card

Offers for credit cards are everywhere. You receive them by mail, in your email inbox, at your bank and when you are shopping in your favorite store. Have you ever really stopped to think about what kind of card is best for you?

A credit card is a handy, useful tool. So is a chainsaw. Both are quite capable of inflicting great damage if you use them improperly! Good advice for handling both tools: choose the right tool for the job, and exercise common sense when you're using it.

There are a few factors to consider before you select a credit card:

- ▶ Your spending habits
- ▶ The different interest rates a card offers for different services
- ▶ The credit limit on the card
- ▶ The grace period
- ▶ Fees and penalties
- ▶ Rewards and incentives.

#### Spending Habits

- ▶ How do you intend to use the card?
- ▶ Will you pay off the entire balance you build up at the end of every month?
- ▶ Do you anticipate carrying a balance from month to month?
- ▶ Will you use it to pay for everything? Just in emergencies? Just for certain purchases?

Answering these questions honestly will help you decide which type of card is right for you.

#### Interest Rates

There may be several interest rates associated with a particular credit card.

- ▶ The **purchase rate** is the interest rate you will pay on your purchases once you carry a balance past the grace period.
- ▶ The **balance transfer rate** may be different from the purchase rate. It applies to balances you transfer from other credit accounts onto the card.
- ▶ The **cash advance rate** can be as high as 20% (or even more). You should avoid using a credit card in this way—there are better ways to get your hands on cash.
- ▶ The **default rate** is the huge rate that will apply if you are late on your payments—that is, you default on your obligation to pay your balance.



## Before You Choose a Credit Card

### **Credit Limit**

This is the maximum amount of money a credit issuer is willing to let you borrow on your card. This limit will be determined by several factors, including your credit score, the type of card you choose and your income. Be careful with credit limits. Maxing out credit cards can be a sign you are in financial trouble and will damage your credit score.

### **Grace Period**

You will be given a certain number of days, typically 28 to 30 days, from the date your bill was produced to pay the entire balance your account had as of the date your bill was produced before interest (at the purchase rate) begins to accumulate on that balance.

Grace periods disappear once you begin to carry a month-to-month balance, and there is no grace period for cash advances. We'll talk more about the grace period later when we discuss finance charges.

### **Fees and Penalties**

When you apply for a credit card, examine the application document carefully. Be sure you are aware of any fees you may be subject to and the circumstances under which the fees will apply.

Common fees include:

- ▶ Annual fee
- ▶ Late payment fee
- ▶ Over-the-limit fee
- ▶ Cash advance fee.

Some credit card companies charge fees for:

- ▶ Paying your bill by phone on its due date
- ▶ Additional copies of your statement
- ▶ Returned checks
- ▶ Balance transfers.

### **Rewards and Incentives**

Many credit card companies offer programs that reward you for using your card by providing incentives like cash back, airline miles or "points" you can use for discounts on goods and services.



## Before You Choose a Credit Card

### Types of Credit Cards

#### Standard Credit Card

This is the most common type of credit card. It allows you to carry a balance from month to month up to a certain credit limit. It is a **revolving balance** card: credit is used up as you spend with the card and becomes available again as you pay down the balance.

A finance charge is applied to the balance on a standard credit card if you carry the balance from month to month. You will be required to pay a minimum payment against the balance of the card. Payment must be made by a certain payment due date. Failure to pay at least the minimum payment by the payment due date will result in a late payment charge, which also is applied to the balance on the card.

#### Charge Card

A charge card does not have a credit limit. The entire balance accumulated on a charge card during the month must be paid in full by the payment due date. This means that charge cards do not allow you to carry a balance from month to month. These cards typically do not have an associated finance charge because the entire balance must be paid **in full**. Late payments or failure to pay the entire balance will incur a fee, a penalty or possibly cancellation of the card altogether.

#### Limited Purpose Cards

These cards can only be used at specific locations. These cards are used like credit cards, and like credit cards, they place a finance charge on month-to-month balances, allow minimum payments and charge late fees. Cards that can only be used at certain stores or gas stations are examples of limited purpose cards.

#### Secured Credit Cards

These cards may be an option for people with no prior credit history or with poor credit history. Secured cards require that a deposit be made on the card. The credit limit on the card will then be the amount of the deposit. In this way, you are actually borrowing your own money. You may be allowed to carry a revolving balance from month to month, depending on how much of your limit you have used and your payment history. These cards can be useful to establish good credit or to reinstate good credit if it becomes blemished.

#### Prepaid Credit Cards

Much like secured cards, these cards establish a credit limit based on how much you “load” onto the card. If you prepay \$1,000 on the card, you can use it up to the \$1,000 limit. As the balance is used, you can reload the card with as much money as you like.





## Before You Choose a Credit Card

### Credit Card Fees

#### Annual Fee

This is a yearly fee charged just for the convenience of carrying the card. Most credit cards do not have an annual fee; this kind of fee is most common for secured cards, charge cards and premium cards like gold or platinum cards that have added benefits and rewards programs.

#### Application Fee

This is a fee charged for applying for a card. Most cards do not have an application fee, but one may be charged for secured credit cards because the application process can comprise several steps, including credit checks and reference checking, which take more time and effort to complete than processing a standard credit card application.

#### Finance Charge

This is the interest applied to a balance that is carried over month to month beyond the grace period. Charge cards do not have a finance charge because the entire balance must be paid in full. Prepaid cards also do not have a finance charge because you are using money you have already loaded on the card. All other types of credit cards *do* have a finance charge.

#### Balance Transfer Fee

A credit card that allows you to transfer a balance from another credit account into that account may charge a balance transfer fee. This fee is typically 1% to 4% of the amount transferred. It is charged only once, when the balance is first transferred, and is in addition to the finance charge you will pay for carrying the balance from month to month. A **cash advance** is a type of balance transfer. A 1% to 4% fee will be charged for this type of transaction, too.

#### Late Payment Fee

You must pay at least the minimum payment on your card by the payment due date or incur this late payment fee. Some card companies tier their late payment fees, meaning that you might be charged \$15 as a late payment fee the first time you are late, \$25 the second time and \$35 each time thereafter. ***Don't be late!*** These fees are a waste of money, and chronic late payments can severely damage your credit score.

#### Returned Check Fee

If you pay your bill by mail using a check and the check is returned to the credit card company because there wasn't enough money in your checking account to cover the payment, you will incur a returned check fee. Getting hit with this fee is just plain silly, so be sure your checking account has enough money in it to cover any checks you write.





## Before You Choose a Credit Card

### Finance Charges

A **finance charge** is quoted as the annual percentage rate (APR) associated with carrying a balance on a particular credit card. If you plan to pay off the entire balance on your card at the end of every billing cycle, you won't incur finance charges. The card's APR doesn't really matter, then, since you will never be charged a finance charge.

If, however, you think you might carry a balance from month to month, a card's APR can be a big factor in deciding whether it is right for you. Different credit cards have different APRs, so look closely at the APRs for cards you're considering. This can save you hundreds, even thousands of dollars in finance charges.

Obviously, the lower a card's APR, the lower the finance charges and the less costly it will be to carry a balance on the card. Let's compare two cards.

**Card A** has an APR of 9.9%. **Card B** has an APR of 16.9%.

If you plan to carry a \$2,000 balance on your card, then...

- ▶ Card A will have an annual interest cost of 9.9% of \$2,000 =  $0.099 \times 2000$  = **\$198/year**.
- ▶ **Card B** will have an annual interest cost of 16.9% of \$2,000 =  $0.169 \times 2000$  = **\$338/year**.

The additional \$140 in interest charged by **Card B** has no benefit to you at all. You'd be paying more on the same \$2,000 balance over the same amount of time. Why pay that much more for the same thing?

If you do carry a balance from one month to the next, the finance charge on your credit card will kick in once your grace period has expired. You'll begin accumulating interest on your balance and your purchases.

Let's take a closer look. Say your billing cycle (or statement cycle) ends on the first of the month, and your grace period ends 21 days from your billing date. This establishes your payment due date as the 22nd of the month.

Now let's say you have run up a \$500 balance on your card by your billing date. The credit card company will send you a bill showing that your balance is \$500 and your payment due date is the 22nd of the month. You will not incur finance charges on the \$500 balance during your grace period, nor will you incur finance charges on any purchases you make during the grace period.

If you pay the entire \$500 balance by the 22nd, no finance charge will be applied, even to purchases made after the 1st. If, however, you pay only the minimum payment or any amount less than the entire \$500, then finance charges will begin to accumulate on not only the entire balance on your card, but also new purchases made after the payment due date. *You will no longer have a grace period* until you pay off the entire outstanding balance on your card by your payment due date.



## Before You Choose a Credit Card

The **minimum monthly payment** is a percentage of your billed balance and can vary from card to card, so be sure to find out the amount required before you choose a card. Typically, a minimum payment is 1% or 2% of the balance or \$15, whichever is more. For example, if your billed balance is \$500 and your minimum payment is 1% of the balance, that would equal \$5.00 ( $0.01 \times 500$ ). However, your real minimum payment would be \$15. If your balance is \$2,000, 1% would equal \$20, your minimum payment in that case.

**Caution!** You will incur finance charges if you pay only the minimum payment.

### Now You Try

You have a credit card from OMG Bank with an APR of **19.5%** and a **2%** minimum monthly payment requirement. You accumulate a balance of **\$3,150** and then stop using the card.

1. What is the annual interest on this balance?
2. What would be the first month's minimum monthly payment?

(Assume the grace period is over and interest is due on the entire \$3,150.)

### Finance Charges on Balance Transfers

A **balance transfer** occurs when you move a balance from one credit account onto another credit card, presumably to take advantage of a lower APR. However, balance transfer fees should be taken into account when determining if a balance transfer will save you money and is therefore a good idea.

Let's say you are paying an APR of 9% on one credit account, and another credit card company offers you a 5.9% balance transfer rate. This may be tempting. After all, paying 5.9% instead of 9% is better, right? But if there is a balance transfer fee of 4% to do the transfer, then you'd pay 4% up front at the beginning of the year and another 5.9% during the year. Add these two rates and you get an effective annual APR of 9.9%, which is more than the 9% you started with! The 4% balance transfer fee is just a one-time cost, but it is still an extra fee.

### Example >>>

Your balance is \$2,500.

You were paying a 9% APR on your original account:  $9\% \text{ of } \$2,500 = 0.09 \times 2500 = \mathbf{\$225/\text{year to carry the } \$2,500 \text{ balance}}$

Then you transferred the balance to the new account:  $5.9\% \text{ of } \$2,500 = 0.059 \times 2500 = \mathbf{\$147.50/\text{year for the same } \$2,500 \text{ balance}}$

But you also paid 4% of \$2,500 as a balance transfer fee:  $4\% \text{ of } \$2,500 = 0.04 \times 2500 = \mathbf{\$100 \text{ balance transfer fee}}$

So, at the end of one year, you would have paid:

$\$100 \text{ transfer fee} + \$147.50 \text{ finance charge, for a total of } \mathbf{\$247.50}$  instead of **\$225**.

**You should have left the balance right where it was!**



## Before You Choose a Credit Card

### Now You Try

You have a credit card from OMG Bank with an APR of **19.5%** and a **2%** minimum monthly payment requirement. The balance transfer fee is **3%** of each balance transferred. You begin with a **zero balance** on the card.

You transfer a balance of **\$1,150** onto the card on the first day of your billing cycle.

You make purchases totaling **\$1,000** during the month and then transfer another **\$2,000** balance onto the card just before your billing date.

1. What is the balance you will owe on the card when you receive your statement?
2. What is the amount of the balance transfer fees you accumulated?
3. What would be the first month's minimum monthly payment?

### Rewards and Incentives Programs

Credit card companies entice you to get *their* card by offering you rewards for using it. These rewards can be valuable. They can also be a waste of money depending on what the rewards are and how you shop.

**Cash back credit cards** offer you a certain amount of cash back at year's end—usually 1% of your spending on the card. If you spent a total of \$12,000 in a calendar year, you would receive 1% of that, or \$120, in the form of a check or a gift card. Sometimes credit card companies offer cardholders the option to use the cash back as a credit on their next statement.

Cash back is the most useful of the rewards programs because everybody can use cash. But be careful: the fine print for some of these rewards programs limits the amount of cash back you can receive and the types of charges that qualify for the reward. If gas purchases are excluded from your card's rewards program and most of your spending on the card is for gas, then you can expect little or no reward at the end of the year.

**Airline miles** are another popular rewards program. These programs usually give the cardholder one mile for each dollar spent on the card. You accumulate miles and bank them toward the purchase of an airline ticket. The airlines have seats designated for rewards promotions, and you must have a certain number of miles to redeem them for a free airline ticket.

Miles needed for a seat vary depending on your destination and the amount of time left before your trip. Seats to Europe or Asia can cost 50,000 miles or more! Even travel within the U.S. can cost 25,000 to 50,000 miles if you buy a ticket within 30 days of your trip, so familiarize yourself with the requirements of specific programs before you choose one. Of course, if you are afraid to fly or rarely travel, an airline miles rewards program doesn't make sense for you.



## Before You Choose a Credit Card

### Factors to Consider

#### Limitations

If a reward program allows you to use your reward only at a certain vendor or store, be sure you like shopping at that store. What good is a reward if you can't spend it?

#### Cost

Some credit card companies charge a fee for belonging to a rewards program. If a company charges you \$200 to belong to a 1% cash back program and you don't expect to receive more than \$200 cash back in a year, then the cost of belonging is greater than the reward itself. Be sure a rewards program actually rewards you!

### Picking the Right Card

When you're ready to pick a credit card, keep the following factors in mind:

#### Spending Habits

How are you going to use the card?

- ▶ If you are going to pay the balance in full, then the interest rate doesn't really matter. Choose a card with no annual fee and a longer grace period so you have longer to pay before you incur finance charges, and look for a card that gives you rewards for using it.
- ▶ If you are going to carry a balance, the APR of the finance charge is your biggest concern. If you will use this card for most of your spending, look for a card with a generous credit limit and a relevant rewards program.

#### Interest Rate

Find a card with a reasonable finance charge APR should you need to carry a balance. Be sure to examine the grace period so you know how much time you will have to pay your card before you incur a finance charge. Be sure to examine the documents that come with the card to determine how the minimum monthly payment is calculated and see what the balance transfer fee is, if any, should you wish to transfer a balance onto the card.

#### Credit Limit

Having too low a limit and constantly maxing out your card also will hurt your credit score. Try to find the right amount, and use the credit you are given wisely.

#### Fees and Penalties

Read the fine print. Find out what fees the credit card company charges, for what services and under what circumstances. Try not to pay extra for a card with a rewards program. Many cards offer rewards for free, so shop around. Be aware of time limits—for example, how long before a payment is considered late—and the charges that coincide with those limits.



## Before You Choose a Credit Card

### NOW YOU TRY SOLUTIONS

#### Page 8

You have a credit card from OMG Bank with an APR of **19.5%** and a **2%** minimum monthly payment requirement. You accumulate a balance of **\$3,150** and then stop using the card.

1. What is the annual interest on this balance?

$$19.5\% \text{ of } \$3,150 = 0.195 \times 3150 = \mathbf{\$614.25}$$

2. What would be the first month's minimum monthly payment? (Assume the grace period is over and interest is due on the entire \$3,150.)

$$0.195 \times 3150 = 614.25$$

$$614.25/12 = \$51.19 \text{ monthly interest}$$

$$3150 + 51.19 = \$3201.19 \text{ total balance}$$

$$2\% \text{ of } \$3,201.19 = 0.02 \times 3201.19 = \mathbf{\$64.02}$$

#### Page 9

You have a credit card from OMG Bank with an APR of **19.5%** and a **2%** minimum monthly payment requirement. The balance transfer fee is **3%** of each balance transferred. You begin with a **zero balance** on the card.

You transfer a balance of **\$1,150** onto the card on the first day of your billing cycle.

You make purchases totaling **\$1,000** during the month and then transfer another **\$2,000** balance onto the card just before your billing date.

1. What is the balance you will owe on the card when you receive your statement?

<b>3% balance transfer fee on \$1,150</b>	1150.00
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$0.03 \times 1150 = \mathbf{\$34.50}$	<b>34.50</b>
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<b>Spending</b>	1000.00
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<b>3% balance transfer fee on \$2,000</b>	2000.00
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$0.03 \times 2000 = \mathbf{\$60.00}$	<b>+ 60.00</b>
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<b>Statement balance</b>	<b>\$4,244.50</b>
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2. What is the amount of the balance transfer fees you accumulated?

$$3\% \text{ of } \$1,150 = 0.03 \times 1150 = \mathbf{\$34.50}$$

$$+ 3\% \text{ of } \$2,000 = 0.03 \times 2000 = \mathbf{\$60}$$

$$34.50 + 60 = \mathbf{\$94.50}$$

3. What would be the first month's minimum monthly payment?

$$2\% \text{ of } \$4,244.50 = 0.02 \times 4244.50 = \mathbf{\$84.89}$$



Name \_\_\_\_\_

Date \_\_\_\_\_

## Student Assessment: Before You Choose a Credit Card

Read the following 10 questions carefully. Select the best answer for each question.

1. Which of the following is true of charge cards?
  - A. They do not have a credit limit
  - B. They are revolving balance cards
  - C. They have a high finance charge when a balance is carried from month to month
  - D. They can only be used at specific locations
2. Which is the most common type of credit card?
  - A. Secured
  - B. Prepaid
  - C. Standard
  - D. Charge
3. Paying only the minimum monthly payment, not the entire balance, by the payment due date for a credit card will:
  - A. Trigger the finance charge, meaning that your remaining balance will begin accumulating interest
  - B. Eliminate the grace period for the next month
  - C. Satisfy your payment obligation to the credit card company
  - D. All of the above
4. The credit limit on a secured credit card is determined by:
  - A. A request from you as the cardholder
  - B. The amount of your prepaid deposit
  - C. Your credit score
  - D. The issuer of the credit card
5. Which credit card fee will hurt your credit score?
  - A. Annual fee
  - B. Late payment fee
  - C. A high APR (finance charge)
  - D. Returned check fee



Name \_\_\_\_\_

Date \_\_\_\_\_

6. You have a credit card with an 11.9% APR finance charge. You accumulate \$900 in charges on this card, \$600 of which were made before the billing date. How can you avoid paying a finance charge on this account?
  - A. Pay \$600 by the payment due date
  - B. Pay the minimum monthly payment before the payment due date
  - C. Stop charging on the card until you are able to pay the balance off in full
  - D. You cannot avoid a finance charge unless you pay the entire \$900 balance by the due date
  
7. If your balance is \$3,500 on a credit card with a 10% APR finance charge and a 2% minimum payment, what would the typical minimum monthly payment be?
  - A. \$350
  - B. \$29.17
  - C. \$70
  - D. \$58.33
  
8. You transfer \$4,000 onto a credit card with a 12.9% APR finance charge and a 3% balance transfer fee. What is the total balance due shown on your first month's statement after the transfer?
  - A. \$120
  - B. \$516
  - C. \$4,636
  - D. \$4,120
  
9. What kind of rewards program would be considered the most flexible and useful?
  - A. Airline rewards, since airline ticket prices fluctuate
  - B. A points program for your favorite clothing store
  - C. ExxonMobil gas rewards, since gas prices are rising so far so fast
  - D. Cash back: you can use cash anywhere for anything
  
10. What should you pay particular attention to when choosing a new credit card?
  - A. Your spending habits and how you intend to use the card
  - B. The finance charge APR and other interest rates for other services
  - C. Fees, which are disclosed on the application and/or buried in the fine print
  - D. All of the above