

Personal Finance in Bite-Size Chunks



Helping Teens make better decisions with their money

21, 30 Minute Bite-Size Lessons

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Personal Finance in Bite-size Chunks

The series of money games from CashCrunch Games focuses on the fundamentals of money habits. Regardless of age, the same habits apply. Currently, the majority of resources and simulation games focus on investments, returns and passive income. But what about the step before this? To save, invest or make money through a passive income stream, we need to have money that we can use to work for us.

To have money, we need to look at our spending habits, get away from loans and purchases on credit and come to grips with our decisions about our needs and wants.

Then, only buy things when we can afford them, if at all.

All products from CashCrunch Games (CashCrunch 101, CashCrunch Senior and Cash Crunch Junior) and all of its resources in this e-book have been designed with the teacher, home schooler and volunteer in mind. These resources are not there to replace the teacher, but simply for the teacher / educator to be able to facilitate discussions and bring about a deeper understanding for their students in a fun and non-intimidating way.

It is the belief of the team at CashCrunch Games, that, by playing the various games and using them as a starting point, will enable countless discussions and activities based on their experiences endured during their game play.

This e-platform book has been written for teachers and educators by a teacher. Approximately 60 percent of teachers and educators are not comfortable teaching financial literacy. We want to help.

The objective is to break this subject up into 30-minute, bite-size chunks. These topics have been made overly simplistic in their content and application, but it is hoped that this will be the foundation to build further knowledge for the student.

We aim to:

- Prevent you from having to reinvent the wheel.
- Give you ample resources.
- Save you time.
- Make life easier for you.
- Provide differentiated lessons through activities and outcome.

This resource has been split up into three sections, which are in separate sections from Reading and Activities.

- The Teacher Section, which will include:
 - Topic name
 - Syllabus
 - Terminology
 - Resources
 - Ideas on how to teach this topic

- Reading Section. This section will provide the basic theory required and it has been written in a conversation style. This allows the student to read about the topic independently.
- Activity. Simple activities have been set, that may include research, discussions and worksheets. These activities will vary in time taken and differentiated by outcome.

There are currently 21 worksheets, which correspond to the current K12 National Standards in Personal Finance Education.

Some topics overlap and therefore some of the resources meet more than one standard.

We plan to keep adding to the list of resources over time, so please check our website www.cashcrunchgames.com for these. Don't forget to play the CashCrunch101 game that can be found on the website, and see how the topics here are connected to the game. CashCrunch Senior game is a 4-player physical board game that not only reflects the real world but also encourages learning about money habits through doing and seeing the consequences of decisions made in a fun and non-intimidating way.

We have kept color and images to a minimum because ink is so expensive.

If you have any feedback or would like to contribute, we would love to hear from you. Please reach out through the [Contact Us](#) section on the www.cashcrunchgames.com website.

Best wishes,

The CashCrunch Team

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TEACHER SECTION

1 Topic: **Need and Wants**

Syllabus: Financial Decision Making

Resources: Reading, Activity.

Terminology: Needs and wants, opportunity cost

Ideas on how to teach this topic:

Everyone has wants, but what do we actually need to survive? A great discussion about essentials can be initiated from this question and no doubt it can get quite heated. Announce that the government has placed a ban on all make-up effective tomorrow. Could they survive? Stereotypical responses: boys would say not a problem, but some girls would be in a panic. If students were marooned on an island and had to survive, what would they need? How is this different from previous comments of needs and wants? Shopping for groceries and so on can be applied to needs and wants. We have introduced the items in their bedrooms but the activity can be applied to anything.

Definitions:

A **need** is something that you cannot live without i.e. water, food for fuel, warmth.

A **want** is something is a luxury. Without it, you will still manage to survive.

Opportunity Cost is the cost of choosing one thing over another.

2 Topic: **Opportunity Cost**

Syllabus: Financial Decision Making

Resources: Reading, Activity Sheet

Terminology: Scarcity, choice, need, wants, value, trade off

Ideas on how to teach this topic:

This is a fascinating topic and can be introduced and applied to any example in the classroom. You may ask them if they bought gum today. How much did it cost? How could they have used that money better? Were there

other brands that were cheaper? Using the price of shoes: have them look at expensive shoes versus the number of inexpensive ones they could have bought. If it is near Super Bowl time, which is the better team? Do they choose a defense or an offense? Would they choose a convertible car over a family car and so on?

This gets students to grasp the idea of why they bought one item or chose one item over another.

A quick example:

If a student drank a can of soda a day for one month in July at a cost of 75 cents a can, it would cost

$75 \text{ cents} \times 31 \text{ days} = \53.25

If a student drank a can of soda a day for a year, he / she would spend

$75 \text{ cents} \times 365 \text{ days} = \273.73

Are they happy spending \$273.73 on soda or could they have used that money elsewhere?

Definitions:

Scarcity is the level of availability of something. The more scarce, the less there is of it e.g. water is scarce in a drought.

Choice is the number of options that you have available to you when making a decision.

A **need** is something that you cannot live without i.e. water, food for fuel, warmth.

A **want** is something is a luxury. Without it, you will still manage to survive.

Value is the perceived worth of something. Generally, the more scarce, the greater the worth e.g. gold is more valuable than sand.

Tradeoff is when you make a decision and there is an advantage or a disadvantage to that decision.

8 Topic: **Earning to Spending**

Syllabus: Spending and Saving; Employment and Income; Financial Decision Making

Terminology: salary, wage, tax, net pay, buying power

Resources: Reading, Activity;

Ideas on how to teach this topic:

Earning to Spending can be related to Opportunity Cost, Needs and Wants, Budgeting and Cash Flow. It can be taught independently or as a follow on from the topics mentioned above. Students need to know the value of

money. What the value of time and spending actually depict. This exercise is based around a chart that represents a salary and ultimately an hourly rate after tax. The tax taken in the chart reflects all taxes that would be deducted from your paycheck. For simplicity, an average of 30% has been the base for tax deduction calculations. The aim of this lesson is to get students to think about their purchases and whether the actual cost is worth their time and effort when buying the good. Hopefully, it will make them think about their Needs and Wants and alternatives more clearly. Once they have completed the first set of Activities based around the Earning to Spending Chart, they should complete the Activities based around the simple calculation on the Earning to Spending Continued worksheet.

Definitions:

A **salary** is money paid for an agreed number of hours worked. It is usually a fixed amount based on a year's efforts, but broken down and paid in smaller amounts, usually on a monthly basis.

Wages are an agreed upon amount to be paid to a person for each hour of work completed. Wages are usually calculated by the number of hours worked by the rate of pay, and paid on a weekly, bi-weekly or daily basis. Wages tend to be for staff whose hours may vary, whereas salaries are for employees with set hours.

Tax is simply a cost to everyone. Tax is collected in a number of ways to help governments raise money to run the country or state. Taxes are worldwide and will vary from place to place. Taxes can vary by state too. There are different types of taxes, which include payroll taxes, the amount taken out of paychecks for Social Security and Medicare; sales tax, the amount charged on top of the price paid for a product; and property, estate and gift taxes.

Net Pay is the amount of money you have left in your paycheck after taxation and other deductions have been made.

Buying Power is the value of your dollar and what it can buy you.

9 Topic: **Budgets**

Syllabus: Financial Decision Making; Spending and Saving; Using a Personal Financial Plan.

Terminology: budget, Cash Flow Forecast

Resources: Reading, Activity

Ideas on how to teach this topic:

Budgets are closely connected to a number of areas such as cash flow, income, expenses, savings, needs and wants and opportunity cost, and less closely to other areas such as credit cards.

Budgets are planned spending, and you can either spend more or spend less. Students need to know how much money they have available to spend and what their current spending habits are.

We suggest teaching this topic after cash flow has been introduced. Students need to know how the general concept of inflow and outflow works. Once they have completed the worksheets and read up on the topic, they can then apply it to themselves by filling out the spending evaluation worksheet. The main focus is for the students to be aware of their spending habits so they can keep to their budgets and try to spend less than they've budgeted. A simple exercise (spending evaluation sheet) can be run concurrently for a limited amount of time in the background (perhaps when you are introducing cash flow for the first time) which will give the students an idea of what they are spending their money on, how much it costs and whether the purchase was indeed worth it.

At the end of the week, students can review their data and put the information into a spreadsheet where they can manipulate the data to create their own cash flow statement with analysis.

If time permits, they can attempt the earning to spending chart, which allows the student to calculate, depending on their hourly rate, how long it would take to earn the money desired to purchase a product of their choice. This acts as a consolidator or introduction to opportunity cost.

Definitions:

A **budget** is a spending plan that keeps you focused on what you must spend and what you want to spend, helping you to monitor your expenses and keep track of your money. If you spend what you don't have, your debt increases

Cashflow Forecast is the planned money that you will receive and spend (income and expenditure) over a period of time.

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Topic: **Exchange Rates**

Syllabus: External Influences; Economics

Terminology: import, export, currency, exchange rate

Resources: Reading, Activity, Internet

Ideas on how to teach this topic:

Exchange rates may not seem like a topic that affects students within personal finance, however, if they are to purchase an item from another country or go on vacation to another country, they will need to buy foreign currency.

The Reading and Activity sections walk the student through what an exchange rate is and how it is affected. There is a research activity that should start a discussion about exchange rates and the relevance to their lives.

Definitions:

Import (to bring in) means to **buy** goods and services from foreign countries.

Export (send out) means to **sell** goods and services to customers who are not in your country.

Currency is the name of the money that is used in a particular country.

Exchange rate is the price of one country's currency against another when being exchanged.

1 NEEDS AND WANTS

I WANT a Ferrari.

I WANT a big house.

I WANT to be a millionaire.

I WANT the latest Nike sneakers.

I WANT the latest smartphone.

I WANT! WANT! I WANT! I WANT!

I NEED transportation.

I NEED somewhere to sleep.

I NEED enough money to eat.

I NEED some shoes.

I NEED to be able to communicate with other people.

There is a huge difference between what you WANT and what you actually NEED.

Question: **If you do not get these WANTS, can you survive?**

If you take a look at the **needs and wants** list above, **are there alternatives available to you?**

Now these WANTS and NEEDS are two extremes initially, but over time some of your NEEDS will turn into WANTS.

This happens through having goals, making plans and achieving them.

By making choices, you are effectively applying the concept of opportunity cost, which can be applied to everyday life. Opportunity cost simply means choosing one thing over the next best alternative. The cost is what you have given up.

For example, if you choose to take a taxi over a bus, you are taking a form of transportation that is going to take you from A to B. The cost is more but you will probably get there quicker and to the exact place you want to be at a time that suits you.

The bus is far cheaper, but you can get to a particular destination but only at specific times. You may not get to sit and you may have to compromise on your final destination.

Activity

Write a list of 10 random items that you have in your bedroom and complete the table below.

For each of the items:

- Give a basic description of the item.
- The cost of the item.
- How often did you use the item when you first purchased it?
- Are there any alternatives on the market to what you bought?
- Is there a difference in price?
- Do you feel you got value for the money with this purchase?

| Number | Description | Cost \$ | Usage, Low, Medium, High | Alternative | Cost \$ | Value for money: Yes, No |
|--------|-------------|---------|--------------------------|-------------|---------|--------------------------|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| | | Total | | Total | | |

The aim of this exercise is not to make you think about buying the cheapest of all the products or necessarily to go without a product. It has more to do with making you think about how you are spending your money and the choices you actually have.

Of all the items that you have listed:

- 1) List whether they are a Need or a Want.
- 2) Would you buy these items again? Explain why you would or would not buy these items again.
- 3) Which items in your room do think have been a waste of money?

2 OPPORTUNITY COST

In life, there are unlimited wants and finite resources. This means that there are lots of things you want, but you only have limited resources such as the amount of money or time available. This is called scarcity.

So, looking at **opportunity cost** you are giving up one thing for the next best alternative. Therefore, the tradeoff or cost of choosing one thing sacrifices the opportunity of having the other.

For example, if you choose to take a taxi over a bus, you are taking a form of transportation that is going to take you from A to B. The cost is more but you will probably get there quicker and to the exact place you want to be at a time that suits you.

The bus is far cheaper, but you can get to a particular destination but only at specific times. You may not get to sit and you may have to compromise on your final destination.

This can be applied to many different examples in your life. When buying shoes, do you sacrifice comfort over fashion, price over durability and so on? The opportunity cost is the sacrifice.

Which of the following would you choose?

1. \$100 cash or \$150 worth of iTunes credit?
2. \$400 cash or a holiday in the Bahamas?
3. A combo meal or a movie ticket?
4. Paying by cash or paying by credit card?
5. Saving money for another day or spending all of your money in the same day?
7. Designer clothes or non-labeled clothes?
8. A 64GB phone or a 32GB phone?

Are there any items that you have bought or decisions you have made that you would reconsider?

Activity

For each of the scenarios, choose one, justify your choice and highlight the opportunity cost.

1. Should a business use machinery or more workers in a factory?
2. When traveling, do you use the highway or the surface roads?
3. When renting a car, do you hire a car for comfort or fuel economy?
4. When going to a theme park, do you upgrade to a VIP pass so you don't have to stand in line as long for rides, or do you save your money to buy food and memorabilia?
5. Do you have an appetizer and a main course, or do you have a main course and a desert?
6. When in a restaurant, do you buy a soda that has free refills, or do you buy a milkshake that does not?
7. Can you think of 5 choices that you have had to make today in the last week?
8. With 2 of the choices that you made, explain what your options were and why you made that decision. For example, did you choose one candy bar over another etc.

8 EARNING TO SPENDING

When working, employees are often offered a job that pays an hourly rate (wage) or a salary. A wage is another word for the sum of hours worked, multiplied by the amount you get paid per hour. If an employee works an 8-hour shift and gets paid \$8 an hour, their wage is \$64 for that day before taxes.

Wage earner employees normally get paid on a weekly basis. A salary is an agreed amount, based on a fixed number of hours worked over a year. Salaries employees are paid on a bi-weekly or monthly basis.

There are also exceptions to this, where some employees work for commission only, based on the sales that they make and get bonuses when hitting their targets. For simplicity, we have only mentioned wage and salaries.

With wages, an employee may have the opportunity to work extra hours and therefore increase their pay.

Salaries on the other hand are fixed amounts of money. Teachers, for example, will not get paid any more money if they stay behind after school to help students or work through their lunch breaks. A salary provides security as the teacher is guaranteed a set amount of money each month. If teachers want to earn extra money, they may have to find a second job. A salaried amount can be divided into an hourly rate. This would be based on the number of hours contracted to work divided by the amount the company pays the employee.

Quite often, we have money in our pocket and spend it on things that we need or want, without considering, the amount of time and effort taken to earn this money. We may not think twice about spending \$5 on food or asking for the latest pair of shoes or game. But if we actually look at how long it takes to earn that money, you may have an appreciation for the time and effort that it has taken to earn that money. Is this want, still worth it? Are there any alternatives that you could choose?

In the Earning to Spending Chart you will see the salary levels, the 30 percent tax reduction and what is left after taxes. The buying power reflects what you are actually earning and able to spend after each hour worked. This is based on an employee working a 40-hour week for 52 weeks of the year, which is equivalent to 2080 hours.

| | | | | | | | | | | |
|--------------------------------------|--|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| Salary | \$10,000 | \$20,000 | \$30,000 | \$40,000 | \$50,000 | \$60,000 | \$70,000 | \$80,000 | \$90,000 | \$100,000 |
| Tax @ 30% | 3,000 | 6,000 | 9,000 | 12,000 | 15,000 | 18,000 | 21,000 | 24,000 | 27,000 | 30,000 |
| Net Pay | \$7,000 | \$14,000 | \$21,000 | \$28,000 | \$35,000 | \$42,000 | \$49,000 | \$56,000 | \$63,000 | \$70,000 |
| Buying Power (2080 hours) | \$3.37 | \$6.73 | \$10.10 | \$13.46 | \$16.83 | \$20.19 | \$23.56 | \$26.92 | \$30.29 | \$33.65 |
| Spending | Number of hours it takes to earn the required amount (Days:Hours:Minutes) | | | | | | | | | |
| \$10.00 | 2:58 | 1:29 | 0:59 | 0:44 | 0:35 | 0:29 | 0:25 | 0:22 | 0:19 | 0:17 |
| \$20.00 | 5:56 | 2:58 | 1:58 | 1:29 | 1:11 | 0:59 | 0:50 | 0:44 | 0:39 | 0:35 |
| \$30.00 | 8:54 | 4:27 | 2:58 | 2:13 | 1:46 | 1:29 | 1:16 | 1:06 | 0:59 | 0:53 |
| \$40.00 | 11:53 | 5:56 | 3:57 | 2:58 | 2:22 | 1:58 | 1:41 | 1:29 | 1:19 | 1:11 |
| \$50.00 | 14:51 | 7:25 | 4:57 | 3:42 | 2:58 | 2:28 | 2:07 | 1:51 | 1:39 | 1:29 |
| \$60.00 | 17:49 | 8:54 | 5:56 | 4:27 | 3:33 | 2:58 | 2:32 | 2:13 | 1:58 | 1:46 |
| \$70.00 | 20:48 | 10:24 | 6:56 | 5:12 | 4:09 | 3:28 | 2:58 | 2:36 | 2:18 | 2:04 |
| \$80.00 | 23:46 | 11:53 | 7:55 | 5:56 | 4:45 | 3:57 | 3:23 | 2:58 | 2:38 | 2:22 |
| \$90.00 | 1:2:44 | 13:22 | 8:54 | 6:41 | 5:20 | 4:27 | 3:49 | 3:20 | 2:58 | 2:40 |
| \$100.00 | 1:5:42 | 14:51 | 9:54 | 7:25 | 5:56 | 4:57 | 4:14 | 3:42 | 3:18 | 2:58 |
| \$200.00 | 2:11:25 | 1:5:42 | 19:48 | 14:51 | 11:53 | 9:54 | 8:29 | 7:25 | 6:36 | 5:56 |
| \$300.00 | 3:17:08 | 1:20:34 | 1:5:42 | 22:17 | 17:49 | 14:51 | 12:44 | 11:08 | 9:54 | 8:54 |
| \$400.00 | 4:22:51 | 2:11:25 | 1:15:37 | 1:5:42 | 23:46 | 19:48 | 16:58 | 14:51 | 13:12 | 11:53 |
| \$500.00 | 6:4:34 | 3:2:17 | 2:1:31 | 1:13:08 | 1:5:42 | 1:0:45 | 21:13 | 18:34 | 16:30 | 14:51 |
| \$600.00 | 7:10:17 | 3:17:08 | 2:11:25 | 1:20:34 | 1:11:39 | 1:5:42 | 1:1:28 | 22:17 | 19:48 | 17:49 |
| \$700.00 | 8:16:00 | 4:8:00 | 2:21:20 | 2:4:00 | 1:17:36 | 1:10:40 | 1:5:42 | 1:2:00 | 23:06 | 20:48 |
| \$800.00 | 9:21:42 | 4:22:51 | 3:7:14 | 2:11:25 | 1:23:32 | 1:15:37 | 1:9:57 | 1:5:42 | 1:2:24 | 23:46 |
| \$900.00 | 11:3:25 | 5:13:42 | 3:17:08 | 2:18:51 | 2:5:29 | 1:20:34 | 1:14:12 | 1:9:25 | 1:5:42 | 1:2:44 |
| \$1,000.00 | 12:9:08 | 6:4:34 | 4:3:02 | 3:2:17 | 2:11:25 | 2:1:31 | 1:18:26 | 1:13:08 | 1:9:00 | 1:5:42 |

Activity

- Using the Earning to Spending Chart and the buying power of someone earning \$10,000. Calculate how long it would take to earn the following items:
 - \$5 combo meal
 - \$69.99 console game
 - \$90 sneakers
 - \$499 smartphone
 - \$17 taxi ride
 - \$600 TV
 - \$3,000 used car
 - \$45 concert tickets
 - \$500 car payment
 - \$75 jacket

2.
 - a) List 5 things you have recently purchased. For each item you listed, add the price you paid and how long it would take for you to earn those items.
 - b) For each of those items purchased, are there better alternatives that could save you time and money and still be worth it to you?
 - c) If opportunity cost means giving up one thing for the next best alternative, using your list of items, explain the concept of opportunity cost and the benefits.
 - d) On the list you created, are there any items that you could not survive without? If you did not buy that item(s) would you still be able to live tomorrow?

3.
 - a) You want to go on vacation but need \$400 to go. How long would it take you to earn the money, based on salaries of \$10,000, \$15,000 and \$80,000?
 - b) Realistically would you be able to save all the money that you earned? If not, why not? Can you give examples?

As well as using the Earning to Spending Chart, for simplicity, there is an even easier calculation that allows you to work out the basic rate you work for per hour, and how long it would take you to earn the money to buy the product.

Calculation:

Take your gross pay, e.g. \$10,000. Remove the three zeros and then divide by 2.

$10,000 = 10$ divided by $2 = \$5$ per hour. The \$5 would be after tax.

If you buy a product for \$15, it will take you 3 hours of work to earn the \$15 to pay for your product of choice. Think about 3 hours of lessons.

4. Complete the following for \$10,000, \$20,000 and \$50,000 salaries:

Calculate the number of hours needed to work using the new calculation method to pay for

1. A new car with a purchase price of \$12,000
2. A combo meal for \$6.49
3. An \$800 laptop
4. A \$489 mountain bike
5. A pair of \$39.99 jeans.

9 BUDGETS

Budgets are planned spending. If you had to go on a hike, you would subconsciously ration your water and food. If you went to a theme park and you were there all day and had to buy food, it would make sense to be careful with your money and not spend it all within the first hour of arriving. This same concept can be applied to budgeting.

You can look at budgeting as a target or plan. We all know that quite often targets move and plans are not kept for various reasons. With this in mind, it is always good to build in a “cushion” for error or unexpected obstacles / consequences.

The “cushion” will depend on your attitude. My pet peeve is when I plan to meet someone at a certain time and they are late. You can look at it at least a couple of ways. You could just relax because you know that this guy is always late, accept it or plan to be late yourself and therefore arrive at the same time, or, get annoyed thinking your time is just as valuable and you made the effort to be on time and so should they.

If you are going for a job interview, it is in your best interest to make a good impression and arrive on time. Arriving earlier is even better, so that you are less flustered, have time to get your thoughts together and when it is time for your interview, you are more relaxed and more likely to answer the questions more thoughtfully and succinctly.

With this in mind, you would adjust your morning routine accordingly. You would get up earlier. Have your clothes set out the night before. Spend time thinking about the types of questions that you may be asked. Leave home early for your interview and build in a “cushion” in the event that traffic is an issue.

These events also can be related to money. Imagine you are going shopping for groceries. You only have \$40. Do you simply put things in your shopping basket and worry about price and the total later, or do you mentally make a note of how much you are spending? If you keep an eye on price and the total amount, when you go to pay, you know you are not in for any surprises and will have enough money to cover the bill and perhaps have some left over.

But if you have not kept a mental note, you may have to take some of your items out of your basket because you do not have enough money to pay for them.

With this in mind, you should consider the following:

- How much money do you have available to spend?
- What are the essentials you need to buy?
- If money is tight, do you have alternatives that you can buy or defer buying, until you do have the money?
- Once you realize how much you have available, you now have a limit of what is available for you to spend.
- But, how about building in that cushion.

Did you know that over 50 percent of Americans do not have enough money to pay an unexpected bill over \$500? In other words, people spend either more than they earn or what they earn and have nothing left.

If you know you are getting a paycheck, you should get into the habit of thinking that your total paycheck is NOT your budget.

If you are able to take 10, 20 or even 30 percent of the pay you receive and put it into a savings account immediately, you will get used to not seeing that amount of money in your checking account. If you get used to not seeing it, you get used to not needing it and you won't feel the need to spend it. Your attitude towards how much you have available to spend will be different and you will be more frugal with your money. You may look for better deals and even go without. Meanwhile, if you save \$100 a month, you will have \$1200 by the end of the year. That is \$1,200! We guarantee you would not have that by the end of the year if you had not taken it out of your checking account in the first place. By having that \$1,200, you are no longer one of the 50 percent of Americans who were mentioned earlier.

To understand where and how you spend your money, you should monitor your money in terms of what you receive and what you spend. This can be done through a cash flow analysis. See Cash Flow Reading.

Activity

To understand where your money goes, you need to look at your personal spending habits.

Task:

1. Construct your own Weekly Spending Evaluation table. This table must be updated each week, as it will summarize your spending. See below.

| Date | Description | (+) income | (-) expense | balance |
|------|-------------|------------|-------------|---------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| | \$ | \$ | \$ |
|-----------------------|--------|--------|--------|
| Weekly Income | Week 1 | Week 2 | Week 3 |
| Allowance | | | |
| Gifts | | | |
| other | | | |
| Total Income | | | |
| Weekly Expenses | | | |
| Food | | | |
| Entertainment | | | |
| Travel | | | |
| Clothing | | | |
| Cell and Internet | | | |
| Gifts | | | |
| Other | | | |
| Total Expenses | | | |
| Difference | | | |
| Income | | | |
| Expenses | | | |
| Cash Flow Summary | | | |

The sub headings are there to help you with categorizing your Income and Expenses

With regards Income, you may earn it, or receive it in the form of an allowance, money in the form of gifts or in other ways such as selling some of your possessions.

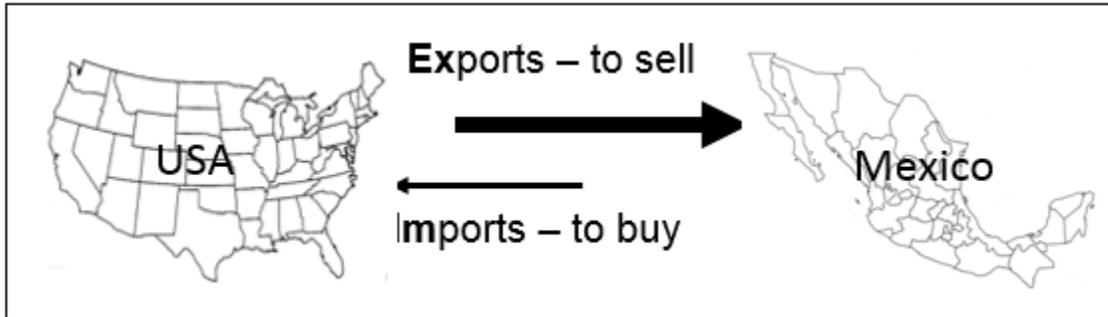
With regards Expenses, all spending on food, snacks, soda etc. Entertainment can include any package of subscriptions, downloads, magazines, music and other activities that occur in your spare time. Clothing is self explanatory. Cell and Internet includes all cell phone bills, along with internet package fees that you must pay. Gifts bought for other people and anything else not covered can go in in Other.

Once you have calculated your Income and Expenses. A simple calculation, which involves subtracting your Expenses from your Income will tell you if you have any money left and if so how much. It is a quick way to gain an idea of your financial wealth.

2. Create your own Daily Spending Evaluation table.
3. Using the Daily Spending Evaluation table, fill in all income and expense transactions.
4. At the end of the week, summarize your totals and add them to your Weekly Spending Evaluation table.
5. If you had your week to do over again, would you spend the same amount?
6. Are there any alternatives to what you bought that could have saved you money?
7. If you had to reduce the amount you spent by \$5, where would you have made your cuts?
8. At the beginning of the week, do you know how much you have to spend? In other words, do you have a budget?
9. If you could save 10 or 20 percent of your budget each week, how much would you have saved by the end of the year?
10. If you have completed the previous topic (Cash Flow) construct a cash flow statement that includes your opening and closing balances as seen as below. To make this easier, start your initial opening balance at \$0.

| | \$ | \$ | \$ |
|-----------------------|--------|--------|--------|
| Weekly Income | Week 1 | Week 2 | Week 3 |
| Opening Balance | | | |
| | | | |
| Allowance | | | |
| Gifts | | | |
| Other | | | |
| Total Income | | | |
| | | | |
| Weekly Expenses | | | |
| Food | | | |
| Entertainment | | | |
| Travel | | | |
| Clothing | | | |
| Cell and Internet | | | |
| Gifts | | | |
| Other | | | |
| Total Expenses | | | |
| | | | |
| Closing Balance | | | |
| Difference | | | |
| Income | | | |
| Expenses | | | |
| Cash Flow Summary | | | |

17 EXCHANGE RATES



When someone from outside the United States visits, it is expected that the visitor use the U.S. currency to purchase goods and services. A business, whether it is a shop, a taxi or even a parking lot will only accept the currency of the United States, just like businesses in Mexico will only accept pesos. This leads to visitors essentially buying / swapping their currency for the currency of the country they are in. When Mexicans arrive in the United States, they will buy / swap U.S. dollars for their pesos.

People, companies and even governments do business with other countries on a daily basis. Examples of this include buying and selling food, financial services, tourism and manufacturing.

To **import** (to bring in) means to **buy** goods from foreign countries, e.g. products that have been bought from Mexico coming into this country. You may see products made in Mexico on the shelves in supermarkets in the United States. This means that originally the Mexican products were paid for in their local currency (pesos), for which U.S. currency (dollars) had been exchanged.

To **export** (send out) means to **sell** to customers who are not in your country, i.e. not in the United States. The customers will then have to change their currency into U.S. dollars to buy products from the United States. This exchange of currency is called the **exchange rate**. Because some exchange rates are stronger than others, a rate is set on a daily basis. An example of this is shown below.

Exchange rate examples:

\$1 = 11 pesos, normal \$100 pair of jeans equals 1,100 pesos

\$1 = 10 pesos, strong for Mexico \$100 pair of jeans equals 1,000 pesos

\$1 = 15 pesos, weak for Mexico \$100 pair of jeans equals 1,500 pesos

Imports – products bought from foreign countries

If the dollar gets stronger, it is cheaper to buy from foreign countries because you get more for your money. A strong dollar encourages imports.

If the dollar gets weaker, it costs more to buy products from foreign countries and therefore demand for imports falls unless alternative (cheaper) suppliers can be found.

Exports – products sold to foreign customers

If the dollar gets stronger, products from the United States get more expensive to buy because more pesos have to be changed into dollars to buy the products. This results in less demand.

If the dollar gets weaker, products from the United States get cheaper to buy because fewer pesos have to be changed into dollars. This results in more demand for American products because they are cheaper.

If businesses decide to keep the price the same in the foreign market place, despite changes in the exchange rate, profits for the company may go up or down due to the value of the dollar and its potential buying power.

The United States is like a shop in the wider world, just like you would see shops selling products in a shopping mall. The more American-made products sold, the more profit is made for the United States. This translates into GDP (jobs and income). Therefore, the United States wants to sell more (export) than it buys (import).

The Exchange rate and the Interest rate.

The interest rate is set by the government to control the flow of money in its economy. The government's aim is to encourage or reduce spending depending on the level of inflation (the general rise in the price of goods) against the rate of unemployment. Interest rates are therefore adjusted accordingly. However, the result of this is that when the interest rate is adjusted, it encourages saving or spending and this has an effect on the exchange rate.

If interest rates increase, more people will save / invest their money (the bank gives more money back on their investment) and fewer people will borrow money because it costs more to pay it back (debts get bigger). This also means that Corporations and Governments may save money in different countries, depending on the interest rate. If the interest rate is high, it means that they will get higher interest (a better rate of return on their investment) on their savings and therefore a less risky investment than buying shares in companies. In order to place money in a foreign bank, foreign currency needs to be bought, which means demand for that particular currency, which causes the exchange rate to strengthen. This action can affect the exchange rate and the rate of imports and exports. With the exchange rate getting stronger, it now means imports are cheaper but exports are more expensive.

If interest rates fall, fewer people will save money because they are not getting as good a return on their savings / investment. Therefore, they take their money out of the banks and spend it, which means that it creates demand. When interest rates are low, money is cheap to borrow (repayments are low) and businesses borrow to invest. The extra spending and investing creates demand for products, which over time creates more jobs and further demand for raw materials, labor and products. This increased demand then causes shortages because there is more money but fewer goods. The resulting increase in costs is then passed on to the consumer and hence prices rise (inflation). With the interest rate being low, there is less demand from foreign Corporations and Governments to put their money into the banks due to their being less return on their investment. This means that there is less demand for currency and therefore the exchange rate is weaker.

To summarize:

Banking is done on an international scale and companies and governments that invest globally want put their money into financial institutions that offer the best interest rates. If the interest rate were raised in the United States, foreign investors would want to invest here where only U.S. dollars are accepted. Because foreign currency would have to be exchanged for U.S. dollars, the value of the U.S. dollar would rise due to the increased demand. The U.S. dollar would then get stronger, which, in turn, could increase the price of products U.S. businesses are selling worldwide making them less competitive.

On a personal level, when you visit another country, you will have to buy the currency of that country. The price that you buy the foreign currency will change depending on the strength of the exchange rate. This change could mean that it becomes more expensive or cheaper to visit that country, i.e. buying food and drink may cost more or less for your dollar.

Activity

1. Using the Internet, find out the latest exchange rates for at least 10 other countries. What is \$1 worth in each of these countries?
2. Using the Internet find out how much a can of soda costs in each of the countries.
3. Using the exchange rates that you found, calculate what it would cost you to purchase one can of soda in each of these countries based on the value of \$1.
4. For 3 of the currencies that you have looked at. Can you find out what the highest and lowest exchange rates were against the US Dollar.
5. Using the highest and lowest exchange rates, calculate what the amount would be if we had exchanges \$1000 for the highest and lowest rates. Use the example of the Mexican Peso as mentioned in the reading section.

DISCUSSIONS

CASHCRUNCH DISCUSSIONS AND ACTIVITIES

The CashCrunch 101 game has been designed with the teacher in mind. It is a resource that is not there to replace the teacher, but for the teacher to be able to facilitate discussions and bring about a deeper understanding for their students in a fun and non-intimidating way. It is the belief of the team at CashCrunch Games, that by playing the game and using it as a starting point, there are a countless number of discussions and activities that can come about.

Here are just a few that the team has come up with. We are sure there will be many more. If you have any additional ideas, we would be happy to post them on the CashCrunch Games website for everyone to see.

From the Fixed Expenses Screen the following discussions and activities could take place:



| JANUARY FIXED EXPENSES | |
|-----------------------------|-----------------|
| House Rent | \$300.00 |
| Phone Bill | \$52.00 |
| Car Insurance | \$121.00 |
| Tuition Fees | \$49.00 |
| Groceries | \$164.00 |
| Gasoline | \$44.00 |
| Total Fixed Expenses | \$730.00 |

House Rent. Rental prices of properties surrounding the school and different neighborhoods. Give reasons for the cost of one property being higher than another. A 3-bedroom house is a 3-bedroom house, right?

The debate whether to buy or not to buy - which leads in to opportunity cost, savings, loan interest rates, etc. Are you there to stay for a long time? Is it an investment? Is there a housing boom? Are there any legal requirements for both? What about liability and general up keep of the house, etc.

Phone Bill. What deals are out there? This is a great activity for comparison pricing. Different deals for different people. Can you find a better deal for the people in your household? What's in the terms and conditions?

Car insurance. What's the legal requirement? Are there different levels of insurance? What are the advantages and disadvantages? Where can you find car insurance? What's in the terms and conditions? What's the risk and reward of paying for the basic versus the most expensive coverage?

Tuition fees. Students are going to college. This is a good introduction into the cost of college and why it is important to make the right subject choice. What do courses cost? What's the benefit of moving away from your local town?

Groceries. Choose a standard basket of groceries, for example: milk, eggs, vegetables, etc. and then run a price check on the various grocery stores in the area. Why does one store charge more than another? Comparison of branded and store-branded goods could be conducted. Collect coupons and discuss ways of cutting grocery costs. Possible reasons for increase in the price of goods, e.g. seasonal fruit, etc. How can you reduce the amount of groceries you need?

Gasoline. Graph the price of gasoline as it fluctuates over the month. Each student chooses a local gas station and charts the price of the gasoline on a daily / weekly basis. On those days, they then calculate what it would cost to fill up a car with a 15-gallon tank and chart the cost. Does the amount fluctuate? If so what would the difference be? Compare your findings with students from other parts of town.

How can you reduce the amount of fuel that you need? Does the price of fuel vary from state to state? Why is that?

Could the fixed monthly expenses be reduced and, if so, how?

Work on cutting your own households monthly expenses.

From the Income screen, the following discussions and activities could take place.

| INCOME | | | | | | |
|--------|--------------|-------------|-------------|---------|----------------|----------|
| WEEK | HOURS WORKED | HOURLY RATE | WEEKLY WAGE | TIPS | (TAX WITHHELD) | TOTAL |
| 1 | 12 | \$9.00 | \$108.00 | \$18.00 | \$25.20 | \$100.80 |
| 2 | 9 | \$9.00 | \$81.00 | \$63.00 | \$28.80 | \$115.20 |
| 3 | 23 | \$9.00 | \$207.00 | \$34.00 | \$48.20 | \$192.80 |
| 4 | 16 | \$9.00 | \$144.00 | \$65.00 | \$41.80 | \$167.20 |
| | | | | | TOTAL | \$576.00 |

Hourly rate. Find out how much various jobs pay per hour. Does the rate depend on skills, qualifications, age, experience etc.? What's a salary?

Tips. In which jobs can you expect to get a tip? Why are tips given and how does your level of service affect your tip rate?

Tax. Why is tax taken out of your paycheck and where does it go? Does the tax rate vary? What types of taxes are there?

Hours worked. Is there a difference between full time and part time? As a student are there any limits on the number of hours you are allowed to work? What are the maximum hours that you are allowed to work during the week before overtime? Are there any legal rights of workers depending on the number of hours worked?

Gross and net pay. How is Gross and Net Pay calculated? What deductions would come out of a paycheck to become net pay? Why could the number of hours vary from week to week?

| | |
|-----------------|------------------|
| Savings | \$3000.00 |
| Checking | \$949.80 |
| | |
| Checking | Savings |
| Networth | \$3949.80 |
| Money Earned | \$134.80 |
| Expenses | \$185.00 |

Savings. Discuss ways in which it is possible to save? Is it worth having an emergency fund? Discuss the ease of setting up a savings account.

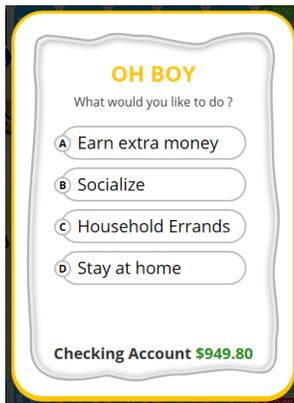
From the Oh Boy cards, the following discussions and activities could take place.



Income cards. What potential sources of income are available to a student? How would you go about finding a part-time job or earning extra income? Find as many potential income streams in your neighborhood as possible.

Expense Cards. What expenses do you incur on a regular basis? How many of your expenses are seen

as essential? Could any of the expenses be cut? Are there any alternatives to the expenses you currently face? Could you record all the transactions that you have made for a week?



Decision Cards. These show the concept of opportunity cost. Are there any consequences from the choices that have been made? If you go out and socialize, could you have benefitted from studying instead? Do you need the extra money or if you stayed at home and reorganized your spending, would that be a better use of your time?

Financial Statements.

| | |
|--|-----------------|
| Checking Account Opening Balance | \$845.09 |
| INCOME | |
| Fixed Monthly Gross Income (80hr x \$9.00) + \$207.00 (tips) | \$927.00 |
| -20% Tax | \$185.40 |
| Fixed Monthly Net Income | \$741.60 |
| Oh Boy Cards Income | \$125.94 |
| Daily Bonus | \$0.00 |
| Total Income | \$867.54 |
| EXPENSE | |
| Oh Boy Cards Expense | \$275.65 |
| Fixed Monthly Expense | \$607.00 |
| Total Expense | \$882.65 |
| Checking Account Current Balance | \$829.98 |

Introducing financial statements and why they are so important.

Opening balance plus Income, take away expenses equals closing balance. Total income minus total expense equals net inflow / outflow.

Why is it important to not just look at your opening and closing balance but also your net cash flow?

Financial Overview. This shows the essence of net worth. How does net worth increase or decrease? Why is it an important concept?

How do savings play an important role in the game? Are there any moments in the game when they are needed? If so, why?

Glossary

What is an overdraft?

An **overdraft** is a short-term loan granted by a bank that lets you take out more money than is in your bank account. An example of an overdraft is to write a check for \$40, when there is only \$20 left in your account.

What is an asset?

An **asset** is something that a person owns which is worth money. It can be used to help make money such as machinery in a factory, borrow against or to sell later on.

What is APR or annual percentage rate?

The **APR** is the **annual (yearly) percentage rate** of interest you are charged on a loan / credit card. Don't forget that you must not only pay back the money that you have borrowed but also the interest that is charged for the privilege of using someone else's money. Yes, a credit card and a loan are other people's money.

What is an ATM (automated teller machine)?

An **ATM** is a "hole in the wall" computerized, 24-hour bank where you can use your debit card or credit card (more expensive) to withdraw money from your account. You are also able to check the balances of your accounts, complete simple banking procedures and deposit money. Some ATMs charge for using them. Always check with your bank to see which ATMs are free for you to use.

What is a budget?

A **budget** is a spending plan that keeps you focused on what you have to spend and what you want to spend, helping you to monitor your expenses and keep track of your money. If you spend what you don't have, your debt increases.

What is bulk buying?

Bulk buying is when goods are brought in large volumes and generally at a discounted price.

What are capital gains?

A **capital gain** is when you sell an asset (something you own) for more than you paid for it. A classic example would be a property or even a collector's item (trading cards). Many people invest in assets, hoping that they will gain in value and therefore make a **capital gain** when sold.

What is capital loss?

Unfortunately, there are times when a person is forced to sell an asset at a loss because they need the money to survive. When an asset is sold for less than was paid for it, it is known as a **capital loss**.

What is cash flow?

Cash flow is a summary of all your income and expenses over a period of time.

Cash inflow is the source of money being received.

Cash outflow is the money that has been paid out.

Net cash flow is the difference between the cash inflow and the cash outflow. Is it positive or negative?

What is a cash flow statement?

A **cash flow statement** is a summary of all your income and expenses over a period of time. Statements can be summarized on a daily, weekly and monthly basis.

What is a cd?

CDs (Certification of Deposit) is a savings scheme where a deposit is made and not touched for a period of time. A guaranteed amount of interest is then paid once the agreed time elapses.

What is collateral?

Collateral is something that you own that is offered to the lender if you don't make your payments; it is like insurance. If you don't pay, the lender gets the value of their loan in other property that you own, e.g. a car being repossessed or a house being foreclosed. The lender is simply taking back the money that is owed to them.

What is comparison shopping?

Comparison shopping is exactly that: it is the process of comparing similar products in terms of price, quality, function, etc. and finding the best deal.