CashCrunch Junior Edition Personal Finance Program.

These lessons are a simple guide to teaching basic finance. The lessons have been written as though the author is talking to you and is simply a guide. It is envisaged that the actual lesson would take no more than 15 minutes. The idea is for the student to gain a basic understanding of the concept, hence the simplicity of the lesson. This allows for further discussions and for students to explore these topics in greater depth with confidence later on.

The philosophy behind this approach of teaching in its simplicity is: "If you understand it, you can explain it". If you understand something, the foundation is there for further concepts of a more complex nature can be added over time. Once the concept has been taught, the rest of the lesson can be used to play the CashCrunch Junior Edition. It is hoped during the game, there are ample opportunities for discussions or situations to occur though playing the game.

Lessons include:

Lesson1: Introduction to Money

Lesson 2: Introduction to Money Denominations

Lesson 3: Making Change

Lesson 4: Needs and Wants

Lesson 5: Opportunity Cost

Lesson 6: Comparison Shopping

Lesson 7: Budgets

Lesson 8: Savings

Lesson 9: Coupons and Sales

Lesson 10: (I) CashCrunch Junior in the Math Classroom

Lesson 11: (II) CashCrunch Junior in the Math Classroom

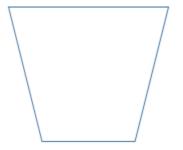
Lesson 12: CashCrunch Junior in the English Classroom

Introduction to money:

There are a number of key words that will be used throughout this program and game play when using CashCrunch Junior. Income (Mo Money), Expenses (Debbie Debt) and Savings (Sammy Savings) and Net Worth.

The focus of this lesson is on the flow of money and the effects of money Inflow and Outflow. A bucket has been used for simplicity where the bucket is the student. The income will be Mo Money and in the game it will be in the form of the Allowance and the Income Oh Boy cards. The Expenses will be in the form of the Debbie Debt Oh Boy cards. The Net Worth will be a combination of Mo Money (Income) and Sammy Savings (Savings/ Emergency Fund).

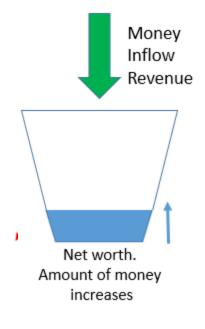
To start this exercise off you should get your students to imagine that money is water.



This bucket is what you are worth.

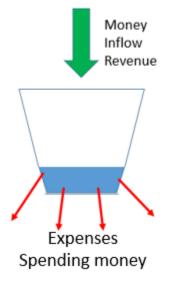
How much money do you have?

If you pour water into the bucket, the bucket fills up. Imagine that the water is money. The level of water rises. The amount of money you have rises.

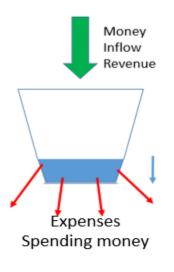


But what happens if you have holes in your bucket and you don't put any more water into the bucket. Your water level goes down.

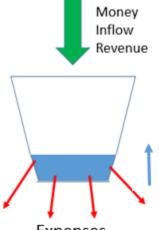
The water running out of the bucket are your Expenses. Money is flowing out of the bucket in the form of Expenses. You are spending money and therefore have less money over time.



If the money coming into the bucket is leaving the bucket at the same rate as it is going out, then your net worth will remain the same because the money level will remain the same.



If money is leaving the bucket faster than it is being put, then your net worth will go down and you will be worth less.



Expenses Spending money

If more money (Income / Revenue / Water is poured into the bucket faster than it leaves the bucket, then the water level / Net Worth level will rise which means you have more money.

Introduction to Money Denominations:

Money is used for a variety of things. Before money was invented, people used to swap / barter and make deals. People would quite often go to a market place to swap goods for things they need. Someone might have a clay pot, but wanted eggs. A trade would be made.

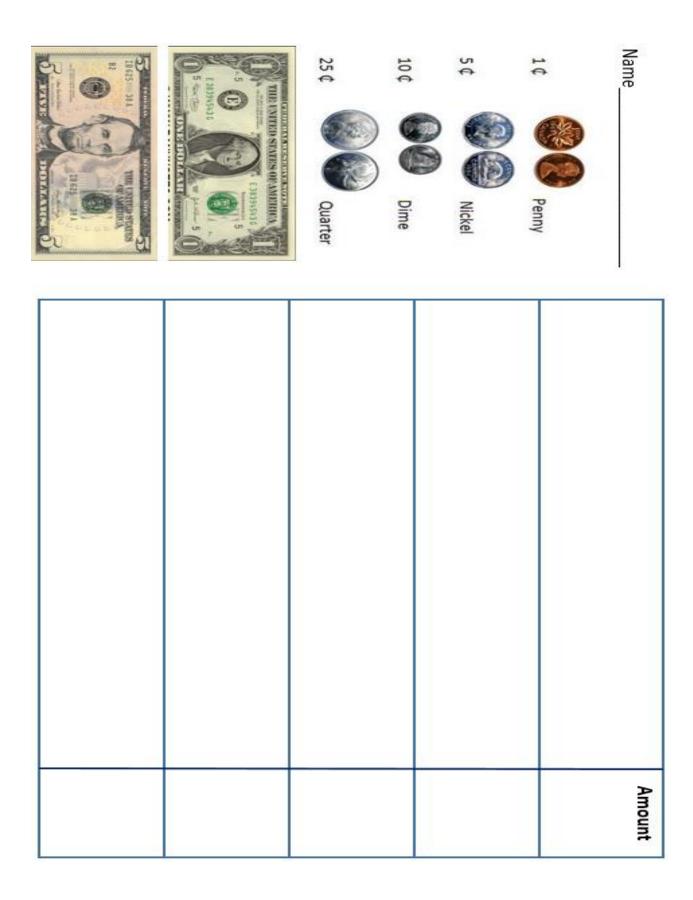
Eventually money was introduced and used. In order to understand money, denominations and the value needs to be understood and applied.

Students should know what the denominations are. Due to the level of the student, the maximum denomination mentioned is the \$5 note. For more advanced classes, further notes can be introduced.

Printout 1.1, can be used to highlight denominations. Insert your own amounts into the table for students to make up the denominations. For example: Using the least number of coins, how would you make up the following amounts e.g. 37 cents – which would equate to 25c, 10c, 1c and 1c

Students should also know that there are other currencies used in the world. This would be a great extension strategy for students:

- Find 10 other currencies used in the world.
- Research how money came to be used.



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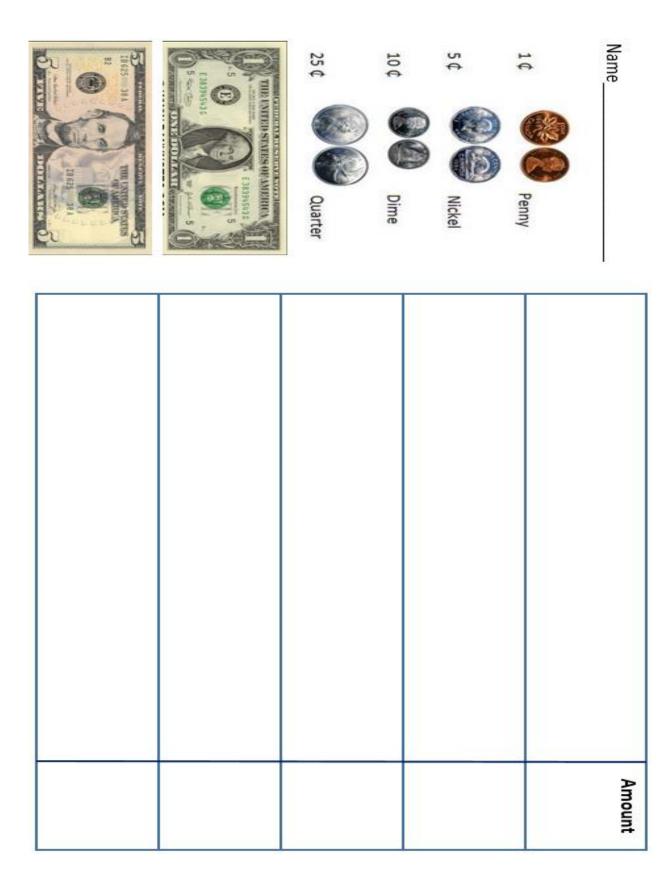
Making Change:

Usually when we buy something, more often than not we do not have the exact money. We will quite often give / pay more than what is asked for and expect change.

Parents may send you to the shop to buy milk, bread or other items. Prices change and it is difficult to know exactly what the cost will be.

Therefore, they will send more money than is need. You pay the shop keeper and they give you change. Parents always ask for change. You need to make sure that the right change had been given.

Using the same printout in the previous chapter Introduction to Money Denominations -Students can complete various subtractions using their coins. For example, The product costs 37c. How much change would you give out of a dollar? -The answer would be 63c. Which he student would draw in 25c, 25c, 10c, 1c, 1c, and 1c. Depending on the ability, the amounts can vary accordingly.



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Needs and Wants:

In order to survive, we have certain requirements" We need heat / clothing to stay warm – hyperthermia We need water to stay hydrated We need food for fuel We need shelter for protection.

But quite often we forget and our wants appear to become our needs.

Designer clothes are not needed.

Expensive meals, sodas etc. are luxuries

Computers are entertainment.

We will still be able to live without these.

Students need to recognize the differences.

The easiest way to highlight this is to draw two columns

What we need.	What we want.
Food for fuel	Hamburgers, pizza, casserole
Warmth, sweater, pants, shoes	Designer jeans, branded shoes
Shelter for protection against the elements	Where would they like to live?
Water for hydration	Milkshake, soda, fruit juice etc.

All the time mentioning the difference between a need and a want.

Opportunity Cost:

This leads on from Needs and Wants.

We all have wants. Each person's wants are different

I am thirsty. Instead of drinking water, I could drink.....? Coffee, milkshake, soda, tea, fruit juice etc.

When we talk about wants, we also talk about choice.

This is the cost of choosing one thing over another.

For example:

- You can have a soda or a fruit juice
- You can have a burger or a hot dog
- You can spend all of your money or you can save some of it.

When you choose one "opportunity", you are losing the option of the other choice. This is the "opportunity cost".

If you are in a restaurant and you choose a hot dog, that means that you cannot have a hamburger, pizza, salad or anything else on the menu. This might be because you only have so much money and cannot afford more choices, or, you can only eat so much and could not finish both.

Choice	Alternative or Opportunity
Hamburger	Pizza, salad, sandwich, hot dog.

The point of this lesson is for the student to recognize that there are choices.

What are your students' choices and why? The opportunity of having choice and the cost of not having the other choices is Opportunity Cost.

Copy the following table onto the board, or take a pole and get each student to choose one choice from each of the categories (food; drink; entertainment). For each of the choices, the student must explain why they prefer that choice over the others. They could even rank their choices from most desired to least desired. This will highlight the choices they have made and the value they have placed on their choice.

Food	Hamburger	Hot dog	Pizza	Salad	Sandwich
Drink	Water	Milkshake	Fruit Juice	Coffee	Soda
Entertainment	Laptop	Tablet	Play Station	Xbox	Bicycle

Comparison Shopping:

We have covered Needs and Wants and Opportunity Cost.

In life, we cannot spend a dollar twice. We have to be more thoughtful about our spending. There are lots of things (products) that we ca buy with our money. Just like when we are at the restaurant choosing food or a drink.

All our choices cost money and sometimes the products are very similar, and we must look to see what the difference between them are.

Remember, we can only spend our money once. Once it has been spent, it has to be replaced.

Products vary in price, size and quality.

We should always compare prices. The first price you see is not always the best price. Quite often you will see shops selling the same products, but the prices will vary. This may be due to the area where the shop is selling the product, the number of competitors that the shop has, whether the shop is trying to clear out older stock to make way for new or is simply having a sale on some products to get the customer into the shop to sell them more expensive products.

Products come in all shapes and sizes and quite often it is difficult to see which is the best deal. Sometimes we buy smaller bottles or single items for convenience. However, if you are doing a weekly or monthly shop or for a special event, you may want to find the best deal for your money. As well as price you have to take into account purpose for buying the product.

Soda can be bought in cans and bottles. Tomato ketchup is available in different sizes, including multi packs.

Here is an example of Ketchup pricing"

Size	Price	Per Ounce (Oz)
14 oz.	3.19	22.8 c
31 oz.	4.59	14.9c
Multi pack	8.99	8.9c

Questions:

When you buy a bottle of water, who is it for?

When would you buy more than one bottle of water?

What are the advantages and disadvantages to buying a multipack of water?

Budgets:

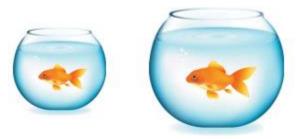
Students need to know that they cannot spend a dollar twice. Therefore, they need to make choices. These choices include Opportunity Cost.

A budget is a "planned amount" that is available to spend. If you spend more, you are over budget and this means you will have less money to spend on other things. If you spend less, you are under budget, and therefore have money left over that you are able to spend on other things or save for another day.

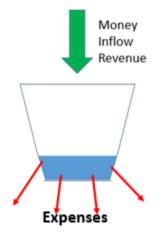
Analogy:

A goldfish will only grow to a certain size, depending on their environment.

The bigger the bowl, the bigger the fish. The more money you have; the more money you will spend. If you have less, you should be able to adapt your spending.



When we budget, we must know how much we have or are able to spend.



Remember the money lesson.

Income received and the available amount to spend.

Expenses should not be greater than the income.

If you receive \$1. The maximum you are able to spend is \$1.

But really you should only plan on spending a maximum of 90 cents, in case you need money for something else.

Savings:

Sometimes it is good to have extra money. Has anyone ever wanted something, but did not have enough money to pay for it?

When you receive money, you should never plan on spending all of it. It is always good to have an "Emergency Fund".

Like the Goldfish analogy, if you limit the amount of money that you can spend, you will make do.

If you receive \$1. You can spend \$1 and have nothing left.

You can spend 90c of that dollar and have 10 c left.

See how easy it is to save. You also have choices that you can make through opportunity cost, needs and wants and comparison shopping.

This can be reflected in this table.

Income	Spend	Save	Total Savings
\$1	90c	10c	10c
\$1	90c	10c	20c
\$1	90c	10c	30c

In the game, players will receive \$5 for each week. Players should be encouraged to save \$1 out of every \$5 weekly allowance received. The results would be as follows:

Week	Allowance	Spend	Save	Total Savings
1	\$5	\$4	\$1	\$1
2	\$5	\$4	\$1	\$2
3	\$5	\$4	\$1	\$3

Coupons and Sales:

Previously we had mentioned Comparison Shopping, where you were able to compare products for the best deal or best suited product.

There are also other ways to save money and that is through Special Offers and Coupons.

Coupons are like free money in stores. They are used by stores and the makers of the products to encourage customers to buy one brand over another. Examples of this can be seen in the Coupons handout. **See printout 1.2**

Coupons vary quite a bit from "get 10 cents off your next purchase" to "Buy One get One Free).

They can be found in newspapers, fliers, the back of your till receipts and even on your phone.

Every week, special offers are sent out in the mail. If you shop regularly, you may see that prices do vary from week to week. This is good for you the shopper as you could potentially save money on those items. The lowering of prices are designed to get you into the store to spend money. Sometimes products are also cheaper, because the makers of the product want to make sure that you the shopper buy their products instead of a competitor's. Again, this helps you the shopper and this is why you the shopper should be aware of prices in stores, so that you know that you are getting a good deal and ultimately saving money.

If you stick to the special deals, then you the shopper will save money overall.

Activity:

If you went to the store and bought: Discussion point, how much have you saved and what could you do with that extra money? Buy more of the same product, use that money for something else or save it in your (Sammy Savings) Emergency Fund.

Product	Price	Coupon	New Price
Soda	\$1	Save 50c	50c
Shampoo	\$3	Save \$1	\$2
Orange Juice	\$3	Save 30c	\$2.70
Total	\$7		\$4.20



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Net Cash Flow Document to be used at teachers discretion.

	Income (Mo Money)	Savings (Sammy Savings)	Expenses (Debbie Debt)	Net Worth / Net Cash Flow
Round 1				
Round 2				
Round 3				
Round 4				
Round 5				
Round 6				
Round 7				
Round 8				
Round 9				
Round 10				

For more advanced students:

	Opening Balance	Income (Mo Money)	Savings (Sammy Savings)	Expenses (Debbie Debt)	Net Worth / Net Cash Flow	Closing Balance
Round 1						
Round 2						
Round 3						
Round 4						
Round 5						
Round 6						
Round 7						
Round 8						
Round 9						
Round 10						

(I) CashCrunch Junior in the Math Classroom



ACTIVITY	Activities: If you went to the shop and bought a candy bar for 84 cents and
Show how you would give 84 cents in the least number of coins.	paid with a dollar. How much change would you get? Write the change you would receive in words.
	What would that change look like in coins?

Write 84 cents in words.

Using the money denominations at the top of the page, how would you make up 84 cents in money denominations?

How could you make 84 cents up without using the 25 cent / quarters?

Write your answer in words.

Complete the Money Habits Word Search.

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PLXTCDFTSFEFYQIVPP UEDJCHDTEGYVWCAGWQ RKAQUUNONFKQXAPHNN CCMYVEDAXOFWSQRNWG HIXZCMHOEFOUARTERS ANJEOCSCRRUEDMCVKP SCVNTUGOUPGSHIJPUE EIEXKFNTNEMYAPMVHN FYRIGEDOLLARHEIEQN WZTFCPPPQSDTLVWKSY TZPEBGPOZGJHTFBTVM CENHSOZLZXXJIYLPIM FTNBZTDFBDNYMTEPKM OIJCAUPHMUHBUNLEJI QLGREBCTCDYBRECMTI IKEKCNBKJLMDSWGAZC RHYZTDTJEJAQUTJOSQ HSACWKOSJZFWMSCDBB

CASH CHANGE DIMES DOLLAR FIVECENTS MONEY NICKEL ONECENT PAYMENT PENNY PRODUCT PURCHASE QUARTERS TENCENTS TWENTYFVE

(II) CashCrunch Junior in the Math Classroom

Total monthly payments on a new \$20,000 car



Loan Repayment -	\$199
Insurance -	\$ 275
Maintenance and Repairs	\$50
Gasoline	\$70
Taxes and Fees	\$20
Parking	\$36

1.

- 1. Using the source, calculate the total cost per month paid for using this car.
- 2. If the car cost \$20,000, how many payments would need to be made before the car is owned by you?
- 3. How many years and months does that equate too?
- 4. Why would it be better to pay more on the loan repayment each month?
- 5. If this car gets 30 miles per gallon and you have bought \$70 worth of fuel at \$2.50 per gallon. How many miles were you able to travel? Show calculations.

Source 2.



Everyday there is a sale somewhere. Using Source 2, calculate the following.

Recently it was Bertie's birthday. With the money, he received and the money that he saved, he would like to buy a new laptop. He has \$900 to spend. He sees that there is a clearance sale on at his local electronics store. The laptop that he would like normally retails for \$800.

- 1. Calculate the sales cost of the laptop if a 10% sales discount is applied.
- 2. Calculate the sales cost of the laptop if a 30% sales discount is applied.
- 3. Bertie finds a refurbished laptop with a lower spec than the one he wanted, but he knows that it will be more than good enough for his needs. The cost was \$700 with a 50% further discount. What is the new price?
- 4. When he gets to the checkout, there is an additional 20% off the discounted price. What is the new price?
- 5. Unfortunately, sales tax of 10% needs to be paid, plus a recycling fee of \$18 is charged on top. What is the total price that you will need to pay?
- 6. As he is about to leave the store, he sees some headphones on display. They cost \$40. He decides to buy them. Sales tax is an additional 10% of the price. He pays with a \$50 bill. What is his change?
- 7. Bertie ask for the change to be paid to you in quarters. How many quarters does he receive in change?
- 8. If Bertie had \$900 to start with, how much does he have left over?

(I) CashCrunch Junior in the English Classroom

INCOME	Activities:
	List any nouns in the Income card. (A n oun is a word that identifies a person, animal, place, thing, or idea).
Well Done for keeping your room tidy for the entire week. Receive \$2	 List any verbs in the Income card. (A verb is a word that expresses an action or a state of being).

Rewrite the Income card in the future tense.

Can you rewrite the Income card in the present tense?

Are there any alternative words for entire and tidy?

Complete the Money Habits Word Search.

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ALLOWANCE CASH CHOICE COST DECISIONS DENOMINATION EXPENSE HELPFUL INCOME MONEY NEED OPPORTUNITY SAVE SPEND WANT

(II) CashCrunch Junior in the English Classroom

INCOME	Activities:
	List any nouns in the Income card. (A n oun is a word that identifies a person, animal, place, thing, or idea).
Thank you for being so helpful for putting the groceries away.	
Receive 50c	List any verbs in the Income card. (A verb is a word that expresses an action or a state of being).

Rewrite the Income card in the future tense.

Can you rewrite the Income card in the present tense?

Are there any alternative words for **helpful** and **groceries**? CashCrunch Junior 2016© 25

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Complete the Money Habits Word Search.

Η	L	V	J	Е	Ρ	G	A	s	С	Y	0	s	E	т	т	Η	Y
М	G	I	R	М	G	Y	Η	Α	т	s	D	Х	D	s	U	D	s
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O H Q E L H	U W H T E A	N P L S L T	G R D J B	A N X O V Z	V E H Y N K	C O S T Y E	F C F F O Z	L U A T P V	V I V M I	R P E I Q L	Z X J Q V	P P L I E S	X X N X M Y	H S V O R Y	W Y N H S H	G E W H A J	Y U C Z C F

CASH COST GOODS GROCERIES MONEY NEED OPPORTUNITY RETAIL SHOPPING SHOPPINGLIST SPENDING SUPPLIES THANKFUL WANT