

MODULE	8		
TITLE	Financials: Profit and Loss		
TIME (approx.)	60+ minutes		
OUTCOMES	 Students will: Develop an understanding of financial terms: Revenue, Costs, Profit, Balance Sheet and Profit and Loss. Solve problems involving business profit and loss and revenue. Apply knowledge to price products to make a profit Develop an understanding of a business loan Create a simple financial plan for their business Develop and understanding of the importance of supporting a charity or cause. 		
KEYWORDS	REVENUE; COSTS; PROFIT; LOSS		
VIDEO	MODULE 8 – Let's Make Some Money Presented by: Melissa Browne, The Money Barre		
ADDITIONAL RESOURCES	 Video Chart displaying words and their definition - Revenue, Costs, Profit and Loss. Sweet Spot display. (printed on A3 paper) Prepared labels for "The Cake Game" Worksheets: Profit and Loss Calculator; Our Business Revenue and Profit; Loan Certificate (from earlier modules) Post-it notes 		

KIDPRENEUR ACTIVITY	EDUCATOR NOTES
MOD 8 – LET'S MAKE SOME MONEY Presented by: Melissa Browne, The Money Barre	DISCUSSION NOTES Getting your head around your business' financials can often seem daunting. However, financial statements show the financial health of your business. Improving your understanding of them can offer valuable insights into how to better manage and grow your small business.
	There are 2 main types of financial statements: Balance sheet: A balance sheet is basically a statement of your financial position at a given time. It outlines your assets (stock, machinery, cash, money owed to you) and liabilities (loans, money you owe). It also captures your net assets or equity. To get a snapshot of your financial position simply take the sum of all your
	assets and subtract the sum of your liabilities. This will show your net worth. Your balance sheet can be prepared by your accountant when you complete your tax return.



Profit and loss: A profit and loss (P&L) tells you how much money your business made over a period of time. It lists your income and expenses. Subtracting your total income from total expenses allows you to calculate your profit.

To keep things simple, in this module Kidpreneurs will focus on Profit and Loss.

1. WHY DOES YOUR BUSINESS NEED TO MAKE MONEY?



KIDPRENEUR WORKSHEET ACTIVITY

Record responses:

Ask: Why do you think a business needs to make money?

Prompts could include:

- What if we made just enough to pay our costs (expenses)?
- Do we need extra? Why?
- How do businesses make money? When the things they sell cost more than it is to produce the product.
- What happens when the cost is more than the money made?
- How do you think a business works this all out when they are setting up their business?

Show words and discuss their meaning:

- Revenue Total money received from sales
- Costs cost to produce your product (raw materials and equipment), promotional material such as posters
- **Profit** Revenue less the cost
- Loss When your costs are more than your revenue

Display these terms on a chart in the room.

DISCUSSION NOTES

While entrepreneurs start businesses for reasons more than making money, (recall reasons businesses exist in the earlier module), a business owner must still focus on making enough money to achieve the business' mission.

A business needs to make enough money to:

- a. Pay for its costs
- b. To grow
- c. To achieve its sale goals & mission statement.

There are two ways to describe the money that a business earns – Revenue and Profit.

 Revenue - Money is generated for the business by customers paying money for its products. The total amount of money received from the products that are sold is called Revenue.

Formula for Calculating Revenue

REVENUE

=

The Number of Products Sold X The Price per Product

- 2. Costs All products cost money to make. Costs can include:
- The cost of buying raw materials;
- The cost of equipment
- The cost of any people paid to help make the product and more.

Formula for Calculating Business Cost

(for the purposes of the Kidpreneur Challenge)

The cost for each business to produce its products

=

The cost of the start-up materials i.e. money loaned

The cost of any other expenses to make products.

Note: freely obtained or recycled materials do not increase business costs.



3. Profit - While revenue is the total amount of money earned from selling products, this is not the amount of money the business gets to keep. The business will use some of its revenue to pay for its business costs. The amount of money made from selling products after paying for business costs is called PROFIT.

Formula for Calculating Profit

PROFIT = Your Revenue - Your Cost

LOSS - When the costs are higher than the revenue the business will not make a Profit. Instead the business will make a Loss.

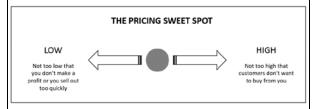
A business should not make a loss, or it will not be possible to pay your staff, pay for your raw materials, pay investors, or sustain the business long-term.

Note: For the purposes of the Kidpreneur Challenge we are focused on profit but it is worthwhile mentioning loss in the context of Kidpreneurs working on their numbers to make their business viable.

2. WHAT PRICE SHOULD WE SELL OUR PRODUCTS TO MAKE A PROFIT?

Discuss as a class:

- How would you price your product?
- Show the class the "Sweet Spot" image after discussion.



DISCUSSION NOTES

Setting Product Prices

It is important to note that revenue and profit are calculated using the quantity of products **sold**, not the amount **produced**. A product must be sold for the business to earn any money from it. For this reason, it is important to think carefully about what prices to charge for products.

Here are some guidelines for pricing products:

- The product price must suit what the target market are prepared to pay for the product design and quality.
- Look for products that are like the business products and find out what
 price they are. Decide if you will charge slightly less to attract customers,
 or slightly more because your products are better quality.
- The price must be higher than the cost of producing the product so that
 a profit can be made. (E.g. a price of \$5 for a product that cost \$10 to
 make, means the business will not make a profit, instead it will lose
 money.)
- The price must not be so high that the target market does not want to buy the product. The business will have lots of products left over at the end of the day and won't make as much money.
- Don't make the price too low otherwise the products might all sell out very quickly and the business won't make as much profit as it could if it had slightly higher prices.



The trick is to find the pricing sweet spot: See Tips and Supplementary Educator Resources for a larger image of the "Sweet Spot".

3. HOW DO I CALCULATE REVENUE AND PROFIT?

INTERACTIVE ACTIVITY The Cake Game

- 1. Play "The Cake Game"
- 2. Compare and discuss the profit made on each of the two sales prices.

ACTIVITY NOTES

The Cake Game

The goal of The Cake Game is to see how the various raw materials that make up a product equate to its cost, and to see how this affects total profit.

The goal is to make an imaginary cake from ingredients of various costs, where Kidpreneurs are each labelled as one of the cake ingredients.

A cake is made from a collection of "base" ingredients plus one "flavour" ingredient.

Preparation:

Write the cake ingredients up on the board as follows:

- Base ingredients: Egg \$1, Flour \$1, Milk \$1
- Flavour Ingredients: Chocolate \$1, Caramel \$2 and Sprinkles \$3
- Write the three possible types of cake on the board as follow:
- Chocolate cake: Egg+ Flour + Milk + Chocolate
- Caramel cake: Egg + Flour + Milk + Caramel
- Sprinkle cake: Egg + Flour + Milk + Sprinkles

Create one ingredient label (written on small pieces of paper) per Kidpreneur in your group by following the below instructions:

- Divide the total number of Kidpreneurs by 4 to find out how many cakes there will be. Now write enough labels for one base ingredient per cake. Labels should say the name of the ingredient and its price. E.g. If you have 26 Kidpreneurs, 26 divided into four is 6 (with 2 extra), so create 6x egg labels, 6x flour labels and 6x milk labels.
- 2. Write enough labels for the flavour ingredients so the total of the flavour ingredients totals the number of cakes. E.g. For a group of 26 with 6 cakes (as above), a total of 6x flavour ingredients would be created i.e. 2x chocolate, 2x caramel, 2x sprinkles

If you have an extra number of Kidpreneurs which didn't divide into 4, create one more product label per remaining Kidpreneur. E.g. for a group of 26 with 6 cakes, there would be 2 extra Kidpreneurs (as above), so create 2 more flavour labels e.g. 1x chocolate, 1x caramel. This means there will be 2 'super cakes' that can have 2 flavour ingredients.

Now there should be enough ingredient labels for 1 per Kidpreneur in the group. Put all ingredient labels into a hat.

To play The Cake Game:

Direct kids through the process of baking a metaphorical cake using their pieces of paper and imaginations.

Get your ingredients: Kidpreneurs draw an ingredient out of the hat one at a time and once everyone has one ingredient they move around the room trying to form a group with the correct amount and type of ingredients to 'bake' one of the flavours of cake.



- 1. **Mix the cake:** Once all groups have formed with the correct ingredients to make a specific type of cake, direct the group to huddle in a team and run around in a circle three times to 'mix their cake'.
- 2. **Bake the cake:** Direct Kidpreneurs to lie on the floor in a row side-by-side on their backs with faces looking at the ceiling. They must lie there completely silent for one minute (60 seconds) to 'bake their cake'.

Cost calculations

Ask each group to calculate the total cost of making their cake and write it down on the board. Answer: Add the cost of each of the ingredients on their pieces of paper together.

Tell Kidpreneurs the cake makes 10 slices and ask each group to calculate cost of each slice of cake, then write this down too. Answer: Divide the total cost of the cake from by 10.

Revenue Calculations: Now tell the Kidpreneurs there are 10 slices of cake and each slice can be sold for \$8.

Ask each group to state the revenue they would make from selling one slice of cake. Answer: \$8

Ask each group to calculate the total revenue if they sold all 10 pieces of their cake. Answer: 10 slices x \$8 = \$80 (Revenue = number sold x price per product)

Profit Calculations:

Ask each group to calculate the profit they would make from selling one slice of cake. Answer: \$8 – cost per slice (Profit = Revenue – Cost)

Ask each group to calculate the total profit they would make if they sold all 10 slices of cake.

Answer 1: Total profit = Total revenue – Total costs **Answer 2 (alternative):** Profit per slice x 10 slices

Repeat steps 5 and 6 but this time change the price of each slice to \$5.

Use the answers written on the board for cost, revenue and profit at the two different product prices for a discussion about product pricing.

Compare and discuss the profit made at each of the two sales prices and ask the following questions:

- 1. Which products could be sold for \$8 to make a profit?
- 2. Which products could be sold for \$5 to make a profit?
- What would happen if the price for each slice was too high?
 (People might not want to buy the product, so the business won't make enough revenue to cover its costs.)
- 4. What would happen if the price for each slice was too low? (The business might sell out of products before they make enough money to cover their costs, so they won't make a profit.)





KIDPRENEUR WORKSHEET ACTIVITY

Revenue and Profit Calculator

Use the worksheet to work out the revenue and profit of a business owned by Curtis the Kidpreneur.

5. The figures demonstrate how charging a higher price per unit can lead to greater profit in total. But remember, this is only true if all the products are sold.

Revenue & Profit Calculator

On the Kidpreneur worksheet is an example of how to calculate the total revenue and profit earned by a business owned by Curtis the Kidpreneur (from the novel Curtis the Kidpreneur: Codename Hawaii).

Read and discuss Curtis' business example, then have Kidpreneurs apply the formula for calculating revenue and profit to Harvey and Raglan's businesses. For each business, 40 items are being sold. This will enable Kidpreneurs to compare how different prices and costs affect total revenue when the same number of products are sold. Discuss the following points:

Harvey makes more revenue and profit than Curtis because she charges a higher price and has the same costs. She needs to make sure her customers are willing to pay this much for her plants or she won't make more money than Curtis if people don't buy them.

Raglan makes less profit than Curtis because he has higher costs but charges the same price. Raglan could try to charge a higher price to make more profit if his customers are willing to pay this amount.

Possible responses are listed in Tips and Supplementary Educator Resources

4. HOW MUCH REVENUE AND PROFIT WILL OUR BUSINESS MAKE?



KIDPRENEUR WORKSHEET ACTIVITY

Complete the worksheet on setting the price for their product using the production line worksheet from Module 7.

Don't forget to review to their Loan Certificate (start-up costs)

In earlier modules you completed a loan certificate to 'borrow the start-up costs" for your business. Refer to this now to confirm your start-up costs to include in the Profit and Loss calculations for your business.



KIDPRENEUR WORKSHEET ACTIVITY

Loan Certificate

ACTIVITY NOTES

Now Kidpreneurs can apply their understanding of revenue and profit to their own business to plan their product prices.

On each worksheet is a template to calculate expected revenue and profit for their business at two different prices. Kidpreneurs should try one lower price and one higher price to see how this will affect the money earned.

Note: if Kidpreneurs have multiple products, they should complete the template for one product only and repeat for other products they might have.

Here are the steps to complete the worksheet:

Begin with the number of products each Kidpreneur expects to sell. This will be the number of products produced using the production line in module 7 and is the same for each calculation. Kidpreneurs write this quantity in row 1 of both columns.

- 1. Choose a low price and a high price to sell this product for and write each price in the correct column of row 2.
- 2. Multiply the figure in row 1 by the figure in row 2 separately for each column and write in row 3. This equals the total revenue the business expects to make if it sells all its products at each of the respective prices.
- 3. Next business costs must be subtracted. This will be the start-up costs plus the cost of any additional raw material added to make the products. Write the same business cost in each column for row 4.



4. Subtract the costs figure from the revenue figure for each column and write the answer for each in row 5. This figure reflects the amount of profit expected if all products were sold.

Ask Kidpreneurs to answer the following questions:

- Which price will help the business achieve its sales goal?
- Which price would the target market be willing to pay for each product?
- What price will Kidpreneurs choose for their product at market/showcase day?

5. WHAT WILL WE DO WITH THE PROFITS OF OUR BUSINESS?

Decide as a business how they are going to use their profits (refer back to Module 2):

- Save it purchase things for the business (reinvestment)
- Spend it business owners can spend it on personal things
- Send it donated to a charity or cause

DISCUSSION NOTES

What is Profit Used for?

Businesses make money. It's why they exist. No profit...no business. And the same is true for "non-profits." No money at the end of the month means no business the next month. There are several ways entrepreneurs can use their profit:

- 1. To reinvest in the business
- 2. To increase the earnings of employees
- 3. To expand the business
- 4. To build liquid reserves
- 5. To better your community
- 6. To support charities and not for profits

The aim of the Kidpreneur Challenge is to show Kidpreneurs how the money generating ability of business can be used to make the world a better place. Business is a powerful way of generating resources to help fund important social and environmental causes and even things for the school or class.



TIPS AND SUPPLEMENTARY EDUCATOR RESOURCES



Model answers for the Revenue and Profit Calculator:

	CURTIS	HARVEY	RAGLAN
Number of Products Sold	40 cards	40 plants	40 bags
X Price Per Product	\$3.00 each	\$5.00 each	\$3.00 each
= Revenue	\$120.00	\$200.00	\$120.00
- Costs	\$75	\$75	\$100 (\$75+\$25)
= Profits	\$45	\$125	\$20



THE PRICING SWEET SPOT LOW Not too low that you don't make a profit or you sell out too quickly THE PRICING SWEET SPOT HIGH Not too high that customers don't want to buy from you