

Let's Bake a Cake

Part 1

Building your financial literacy knowledge, skills, and confidence one step at a time.

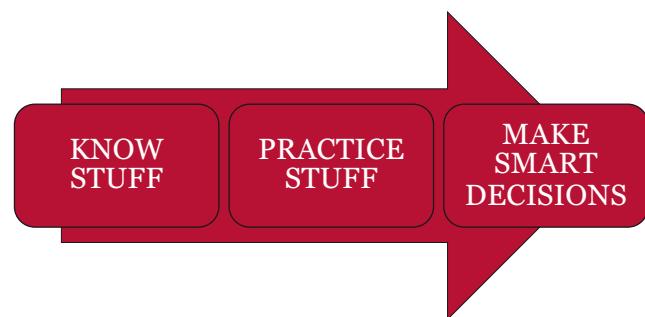


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What is financial literacy?

Financial Literacy is “having the **knowledge, skills, and confidence** to make responsible financial decisions”.



When you're done this activity, you will

Know financial stuff

- ✓ Use your mathematical knowledge to identify prices and calculate the **unit cost** and **total cost** of the ingredients needed to make your cake.

Practice financial stuff

- ✓ Set a **financial goal** and make a **plan** to achieve it.

Make smart financial decisions

- ✓ Identify deals when shopping to get the most **value for your money**.
- ✓ Explain why **selling prices** can differ for similar items so you can make **smart purchase decisions**.

Let's go shopping

Section 1 - Choose a cake recipe



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What ingredients do you need? (Worksheet A)

Choose a cake recipe and get shopping! Assume you have nothing in your fridge or pantry and need to buy all the ingredients needed to make your cake.

- ✓ Create a shopping list that includes all the ingredients you will need. Take note of the quantities needed.
- ✓ Choose a grocery store in your area and use their online site to identify the prices of each of the ingredients you will need. Take note of the quantities you will need to purchase (example – you may only need 1 cup of flour, but the store may only sell flour in 1 kilogram bags).
- ✓ Calculate the **total cost** of all the ingredients you will need to purchase.



TEACHER TIP: Take time to discuss different types of measurements used in recipes and explore online tools that help to convert from one measurement to another.

Helpful resources:

<https://www.foodnetwork.ca/article/your-ultimate-guide-to-cooking-and-baking-conversions/>
<https://www.thecalculatorsite.com/cooking/>

Where are the deals? (Worksheet A)

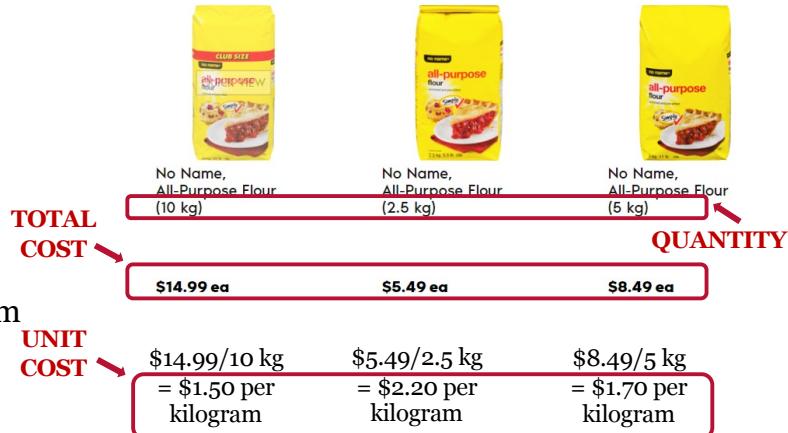
Is that the best value for your money? Shop around and see what you find.

- ✓ As a class, discuss how you might be able to reduce the total cost of your shopping list.
- ✓ Explore other online shopping sites to see if you can find a lower price for some of your ingredients.
- ✓ Update the cost of the items on your grocery list to reflect the best deal you can find and re-calculate the total cost of your shopping list. How much did you save by shopping around?

Spend more to save - how?

What quantity should I buy?

- **Total Cost** is equal to the selling price
- **Unit Cost** is equal to the selling price divided by the quantity
- As a class, discuss which item is the best value for your money? Why?



Source: zehrs.ca (November 13, 2023)

Let's make some money

Section 2 - Set a financial goal



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What's your goal? (Worksheet B)

You love your cake and so does your family, so you've decided that during your summer break you're going to sell your cakes to the friends, family, and neighbours.

- ✓ How much money would you like to make? Set a financial goal that reflects something you'd like to save for. Your goal should describe what you are saving for and how much money you'll need.
- ✓ Write it down. Writing down a specific goal and putting it somewhere to remind yourself can increase the chance that you'll achieve your goal.



Teacher Tip – use the SMART framework for setting a goal.

Helpful resources:

<https://www.mydoh.ca/learn/blog/education/how-to-help-kids-and-teens-set-and-achieve-goals/>

Make a plan to achieve your goal (Worksheet B & C)

To plan how you can meet your goal, you will need to figure out how much you should sell your cake for. You will need to sell your cake for more than it costs to make. The difference between the **selling price** and the **cost** will go towards achieving your goal.

- ✓ Using what you know about total costs and unit costs, calculate how much your cake costs to make. What is the cost to make one (1) cake? This is the **unit price** of one (1) cake.
- ✓ Decide how much you want to sell your cake for? Be sure to do some market research to see if your **selling price** is reasonable. If it's too expensive, people will purchase a cake from someone else.
- ✓ What is the difference between your selling price and your cost?



Teacher Tip – students may need to use a conversion calculator to calculate unit costs (see slide 5 for suggested resources)

Make a plan to achieve your goal continued (Worksheet B & C)

Knowing what you now know about your cake's **unit cost** and **selling price**:

- ✓ How much money will you make if you sell 10, 20, 50, or 100 cakes?
- ✓ How many cakes will you need to sell to meet your goal?
- ✓ Is your goal reasonable? If no, what could you adjust to make your goal more reasonable?



Teacher Tip – Encourage students to consider what they could adjust if their goal isn't reasonable. Students could adjust their goal, adjust the cost of their cake by searching for cheaper ingredients, or adjust the price of their cake (if they think customers would be willing to pay the extra amount).

Hmmm...

Consider the two terms you've just learned, cost and selling price, and your experience "shopping" for your cake ingredients.

- ✓ What factors influence the cost of an item?
- ✓ What factors influence the price of an item?
- ✓ Why might similar items have different prices?

Let's Bake a Cake

Part 2

Building your financial literacy knowledge, skills, and confidence one step at a time.

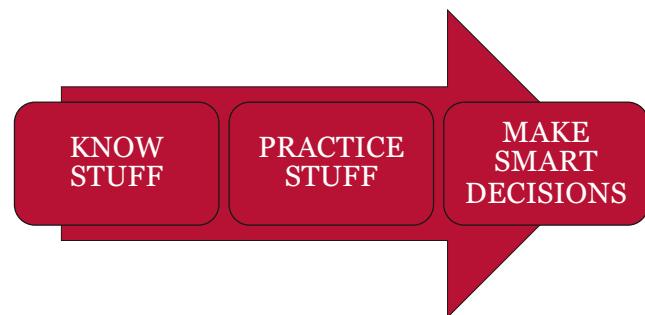


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What is financial literacy?

Financial Literacy is “having the **knowledge, skills, and confidence** to make responsible financial decisions”.



When you're done this activity, you will

Know financial stuff

- ✓ Distinguish between **fixed** and **variable expenses**.
- ✓ Identify the pros and cons of different **borrowing** options.
- ✓ Describe the differences between being an **employee** and being **self-employed**.

Practice financial stuff

- ✓ Prepare a **budget** for a small business.

Make smart financial decisions

- ✓ Apply your understanding of the relationship between income and expenses to adjust a budget for changes in one or both.
- ✓ Reflect on the pros and cons of a career path as an employee or as a self-employed individual.



Teacher Tip – If using Google Sheets, a modified learning outcome (practice) is “Use basic spreadsheet functions to perform simple calculations and use the results to create/modify a budget for a small business.”

Turn your hobby into a business

Section 1 - Build a business budget



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Business expenses – variable

Your summer of selling cakes was a success and you met your goal! Now you're considering making it less of a hobby and more of a business by selling your cakes at a local market. As a business, you will incur additional expenses (costs).

- ✓ **Variable Costs** are costs that increase the more cakes you make and sell.

Example – the unit cost you calculated in Part 1 (the cost to make one cake) is a variable cost. If you make one cake it will cost X, two cakes it will cost $2X$, and so on. The cost of making the cake is a variable cost. If you do not make any cakes, you do not pay for this cost.

- ✓ As a class, brainstorm any additional variable expenses you might have if you decide to sell your cakes at the local market.

Business expenses – fixed

Your summer of selling cakes was a success and you met your goal! Now you're considering making it less of a hobby and more of a business by selling your cakes at a local market. As a business, you will incur additional expenses (costs).

- ✓ **Fixed Costs** are costs that remain the same no matter how many cakes you make and sell.
Example – you will need to pay the market \$150 per month to rent the market stand. If you make zero cakes, ten cakes, or 100 cakes, you will pay \$150 rent each month. This rent is a fixed cost.
- ✓ As a class, brainstorm any additional fixed expenses you might have if you decide to sell your cakes at the local market.

Budget your expenses (Worksheet D)

Now that you identified some expenses, you can start working on your **budget**. A budget estimates the money coming in (income) and the money going out (expenses) of your business so that you can use this information to make smart business decisions.

- ✓ Summarize the expected expenses of your business.

Budget your income (Worksheet D)

It is more difficult to estimate business **income** because you don't know how many cakes you will sell. However, knowing your budgeted expenses can help you figure how many cakes you will need to sell to pay for your expenses.

- ✓ Calculate how many cakes you will have to sell to pay for your expenses for the next 6 months.

✓ Step 1: Calculate the difference between your selling price for a cake and the variable costs of making a cake.

✓ Step 2: Total the fixed costs for the period (6 months).

✓ Step 3: Divide Step 2 by Step 1

$$\frac{\text{TOTAL FIXED COSTS}}{\text{SELLING PRICE} - \text{VARIABLE COSTS}}$$

- ✓ Is the number reasonable? If not, what could you adjust to make it more reasonable?



Teacher Tip: Before showing students the steps to calculate, challenge them to figure out how they could calculate the # of cakes required to be sold and represent it with a mathematical formula.

Prepare your budget (Worksheet E)

Now that you have income and expense estimates, you're ready to prepare a complete budget.

- ✓ Summarize the estimated income and expenses of your business for the next 6 months, assuming you sell just enough cakes to pay for your expenses.
- ✓ Are you happy selling just enough cakes to pay for your expenses? What if you want to make some money to pay yourself for all your hard work making these cakes?
 - If you wanted to make \$500, how many more cakes would you need to sell? Update your budget to reflect this change.

Financial decision making

Section 2 - Make smart business decisions



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Making smart decisions – adjust your budget (Worksheet F)

It's the end of day 1 at the market and you didn't sell any cakes. You've learned that your cakes are too expensive, and you will need to reduce your selling price by \$1.

- ✓ Calculate how many more cakes you will need to sell to pay for your expenses.
- ✓ Adjust your budget to reflect this change.

Because of the selling price reduction, you did some research and found a different type of packaging that is not only compostable, but it's also cheaper by \$0.50 per box.

- ✓ How does this impact your budget? Will you need to sell more or less cakes to pay for your expenses?
- ✓ Adjust your budget to reflect this change.

Making smart decisions – challenge yourself

Now that you know how to adjust your budget for changes to income and/or expenses, make up your own scenario.

- ✓ How does this impact your budget? Will you need to sell more or less cakes?
- ✓ Adjust your budget to reflect this change.

Hmmm...

Consider the budget you just created and adjusted.

- ✓ How can a budget help small business owners make smart financial decisions?
- ✓ How can a budget help you make smart financial decisions?
- ✓ What could make creating and adjusting a budget difficult?
- ✓ What could make creating and adjusting a budget easier?



Teacher Tip: Using a spreadsheet can help make budgeting and modifying a budget easier. Students who have access to Google Sheets and who want to learn to use basic spreadsheet functions could be encouraged to complete this activity (Part 1 and/or 2) using a spreadsheet rather than the individual worksheets.

Future entrepreneur?

Section 2 - Employee vs. Self-Employed



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Employee or Self-Employed – what's in your future?

Congratulations! Your first 6 months of business have gone well, but it was a lot of work. Being an entrepreneur is hard! You love baking and are considering pursuing it as a career, but you are not sure if entrepreneurship is the right path for you.

- ✓ As a class, discuss the difference between being an employee and being self-employed.
- ✓ Divide the class in two. One group will be **employees** (e.g. working as an employee at a restaurant or bake shop) and one group will be **self-employed** (e.g. owning a small restaurant or bake shop). With your group, develop a list of pros and cons to present to the class.
- ✓ Consider which path you might prefer and why?



Teacher Tip – students could be encouraged to locate and interview a small business owner in their community. As a class, students can brainstorm questions they'd like to ask these entrepreneurs.

Resources:

- <https://www.canada.ca/en/revenue-agency/services/forms-publications/publications/rc4110/employee-self-employed.html>
- <https://ca.indeed.com/career-advice/finding-a-job/employed-vs-self-employed>



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