

Bake Sale Lesson 3: Finance and Accounting

SUBMITTED BY: WGYP Summer Educator

SUBJECT(S): Entrepreneurship

GRADE LEVEL(S): 9, 10, 11, 12

≡ OVERVIEW:

In the overall project, Bake Sale, the class will become a company. In this section of the unit, students will learn about financing their bake sales and making financially educated decisions. They will research two types of bake sale goods they might make and sell at the bake sale. They will learn about variable costs and revenue. They will then make a decision based on the finances they explored.

≡ NBEA STANDARD(S):

- Entrepreneurship, IV. Finance
- Entrepreneurship, V. Accounting

≡ RELATED ARTICLES:

- [“The Silicon Valley Start-up that Began with Legos and a Market Need”](#)
- [“Mark Cuban’s ‘Mini-Me’ on What It’s Like to Work with an Investor”](#)

Standards:

- Use the financial concepts and tools needed by the entrepreneur in making business decisions.
- Use planning and control principles to evaluate the performance of an organization and apply differential analysis and present – value concepts to make decision.

Common Core Standard(s):

- CCM Standard for Probability Overview: Summarize, represent, and interpret data on two categorical and quantitative variables.
- CCR Standard for Speaking and Listening: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
- CCR Standard for Speaking and Listening: Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
- CCM Standard for Number and Quantity Overview: Reason quantitatively and use units to solve problems.

Objectives/Purposes: Students will learn about fixed costs, variable costs and revenue. They will make financial decisions regarding what to sell at the bake sale.

Other Resources/Materials:

- Worksheet Fudgie Accounting
- Computers if available
- Calculator
- Poster board or Newsprint
- Markers

Activity Day:

Student Worksheet

1. Do Now: Think about a type of item you might want to make for the bake sale. Write down a list of the ingredients you will need. (5 min)
2. Teacher will go over fixed and variable costs and can show the glossary video definition https://globalyouth.wharton.upenn.edu/glossary/fixed_variable-cost/ given by Professor Gavin Cassar. The teacher can write or read the following list (items to make fudge) and then students will determine whether the items are fixed or variable costs. (5 – 10 min)

- Cooking Pan
- Condense Milk

- Chocolate Chips
- Mixing Bowl
- Butter
- Spoons
- Knife
- Paper Napkins

3. Teacher will then show the glossary video definition of revenue

<https://globalyouth.wharton.upenn.edu/glossary/revenues/> presented by Professor Wayne Guay. Go over how the students should decide how much to sell their products for and then estimate the revenue, using the information from variable costs to help guide their decisions. The teacher could use the example below. (5 min)

4. For this project, students can assume the fixed costs are taken care of. We will not worry about those since this is not a long-term business, but if we were to set up a bake sale business, then the company would need to consider those items and include it in the finances. For this, students need to research the cost of each variable cost. From there, they need to figure out how many of the products they could make and then suggest a cost. Teacher can use the worksheet Fudge Accounting. (5 – 10 min)

Ingredients and Cost of Ingredients for Fudge

Condensed Milk (need 14 oz)

1 can is 14 oz for **\$3.29**

Chocolate chips (need 24 oz / 3 cups)

1 bag is 12 oz for \$3.59

2 bags would be 24 oz (2 x 3.59) for a total of **\$7.18**

Butter (need ¼ cup)

1 box is 2 cups for **\$4.99**

So this will give us enough butter to make 8 servings.

Number of 8 x 8 Pan	Serving 16	Cond Milk	Choc. Chips	Butter	Total Cost
1	16	\$3.29 1 can	\$7.18 3 cups (2 bags)	\$4.99 1/4 cup	\$15.46
2	32	\$6.58 2 can	\$14.36 6 cups (4 bags)	\$4.99 1/2 cup	\$25.93
3	48	\$9.87 3 can	\$21.54 9 cups (6 bags)	\$4.99 3/4 cup	\$36.40
4	64	\$13.16 4 can	\$28.72 12 cups (8 bags)	\$4.99 1 cup	\$46.87
5	80	\$16.45 5 can	\$35.90 15 cups (10 bags)	\$4.99 1 1/4 cup	\$57.34
6	96	\$19.74 6 can	\$43.08 18 cups (12 bags)	\$4.99 1 1/2 cup	\$67.81
7	112	\$23.03 7 can	\$50.26 21 cups (14 bags)	\$4.99 1 3/4 cup	\$78.28
8	128	\$26.32 8 can	\$57.44 24 cups (16 bags)	\$4.99 2 cup	\$88.75

If you Sell for \$0.50 If you Sell for \$0.75 If you Sell for \$1.00

# To Sell	Variable Cost	If you Sell for \$0.50		If you Sell for \$0.75		If you Sell for \$1.00	
		What you Make	Profit or Loss	What you Make	Profit or Loss	What you Make	Profit or Loss
16	\$15.46	\$ 8.00	\$ (7.46)	\$ 12.00	\$ (3.46)	\$ 16.00	\$ 0.54
32	\$25.93	\$ 16.00	\$ (9.93)	\$ 24.00	\$ (1.93)	\$ 32.00	\$ 6.07
48	\$36.40	\$ 24.00	\$ (12.40)	\$ 36.00	\$ (0.40)	\$ 48.00	\$ 11.60
64	\$46.87	\$ 32.00	\$ (14.87)	\$ 48.00	\$ 1.13	\$ 64.00	\$ 17.13
80	\$57.34	\$ 40.00	\$ (17.34)	\$ 60.00	\$ 2.66	\$ 80.00	\$ 22.66
96	\$67.81	\$ 48.00	\$ (19.81)	\$ 72.00	\$ 4.19	\$ 96.00	\$ 28.19
112	\$78.28	\$ 56.00	\$ (22.28)	\$ 84.00	\$ 5.72	\$ 112.00	\$ 33.72

128 \$88.75 \$ 64.00 \$ (24.75) \$ 96.00 \$ 7.25 \$ 128.00 \$ 39.25

5. After the teacher goes through each part, students will work in partners to answer the three questions on the worksheet. Teacher should remind students that they must support their answers.
6. Students will work on the variable cost and figure out how many items they could make and what the cost would be to make that many. (10 – 15 min)
7. Students will work on estimating the revenue. (5 min)
8. Wrap Up: Students will state what they are going to make, how much it will cost, how many they will make and what the potential revenue will be.

Practice Outside of the Classroom:

If there is not enough time to complete the lesson, students can finish at home. The teacher might also want to assign students to make a graph to illustrate the most effective amount to make and sell.

What Worked and What I Would Do Differently:

This lesson has a lot of math calculations. It would be good for students to have access to computers or some additional time. Students might also need computers to research the cost of bake sale items.