The Muffin Decision

Use a street-fair sale to examine economic choices.

E.C.1.1 "Define and explain basic economic concepts (e.g., scarcity, surplus, opportunity cost, cost/benefit analysis, risk/reward relationship, incentive, and trade-off) and apply them to a variety of economic situations."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline two limited resources, circle the quantities that show unsold muffins at $3, and number the two ways one volunteer could spend next Saturday morning.

One Hour Left at the Fair

1. At the Saturday street fair, a student-run bakery has one small table and two volunteers for a four-hour shift. They can prepare either extra muffins or fruit cups, but not both, because their space and preparation time are limited. The group chooses muffins, which cost $1 each to make, and brings 60 to sell at $3 each. At that price, shoppers buy 40 muffins during the first three hours. The volunteers still have 20 muffins with one hour left. Nearby, another booth sells fruit cups to shoppers looking for a lighter snack.

2. After seeing the unsold food, the volunteers consider lowering the price to $2 for the last hour. They predict that a lower price will attract more buyers, but each discounted muffin will bring in one dollar less than a full-price sale. They try the change and sell 15 more muffins; five remain. In economics, a surplus occurs when the amount offered for sale at a particular price exceeds the amount buyers purchase at that price. Even a busy booth can face a surplus if its price is too high for some customers.

3. The team must decide whether to make 60 muffins again for next week's fair. The ingredients would cost $60, paid before anyone buys a muffin. One volunteer could spend next Saturday morning preparing muffins or repairing bicycles for $24. At this fair, muffin sales brought in $150: $120 at the original price and $30 after the discount. That revenue exceeds the ingredient bill, but next week's sales are uncertain. Rain could keep shoppers away, leaving the team with muffins they cannot sell later. The volunteers discuss the possible earnings, the money they could lose, and what else they could do with their time.

2 ANSWER WITH EVIDENCE

Use the passage

1. How do the bakery's limited resources create a trade-off between muffins and fruit cups?

2. Explain why the bakery has a surplus after the first three hours at $3 per muffin.

3. How does the price cut change shoppers' incentive, and what does the bakery give up by making it?

4. If the volunteer prepares muffins next Saturday, what is the opportunity cost of that time? Identify one possible reward and one risk for the team.

3 YOUR TURN

Your own words

Invent a choice for a school club with limited money or time. In 4 to 5 sentences, explain the scarce resource, a trade-off and opportunity cost, and one possible risk and reward, then use a cost-benefit reason to state which option you would choose.

ANSWER KEY

The Muffin Decision

HIGH SCHOOL · E.C.1.1

PART 1 · READ AND MARK

Underline two limited resources, circle the quantities that show unsold muffins at $3, and number the two ways one volunteer could spend next Saturday morning. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How do the bakery's limited resources create a trade-off between muffins and fruit cups?	**Limited table space and preparation time prevent the group from making both. Choosing extra muffins means giving up fruit cups.**
2	Explain why the bakery has a surplus after the first three hours at $3 per muffin.	**The bakery offered 60 muffins at $3, but shoppers bought only 40 during those hours, leaving 20 unsold.**
3	How does the price cut change shoppers' incentive, and what does the bakery give up by making it?	**A $2 price makes a muffin more attractive to shoppers. The bakery gives up $1 in revenue on each discounted muffin compared with a full-price sale.**
4	If the volunteer prepares muffins next Saturday, what is the opportunity cost of that time? Identify one possible reward and one risk for the team.	**The volunteer gives up $24 from repairing bicycles. The team might earn money from muffin sales, but rain could leave it with unsold muffins after paying for ingredients.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Our debate club has $80 and must choose between buying practice books for $60 and hiring a guest coach for $80. If we buy books, we give up the coaching session, which is the opportunity cost of our choice. The books can be used by future teams, so their long-term benefit may outweigh their price. The risk is that few students will use them, while the reward is stronger practice for many students. I would buy the books because they can help several teams instead of only this year's members.

Accept other accurate descriptions of the trade-off and opportunity cost. For question 4, a valid risk must concern an uncertain outcome, not just the known $60 ingredient cost.