The Repair Choice

Use economic reasoning to examine a bike club's decision.

E.C.1 "Develop and apply economic reasoning and decision-making skills. Define and explain basic economic concepts (e.g., scarcity, surplus, opportunity cost, cost/benefit analysis, risk/reward relationship, incentive…"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the scarce resource, write 1 beside the club's chosen plan and 2 beside its next-best plan, and circle the incentive that could change riders' behavior.

Two Hours at the Trail

1. On Saturday, a student bike club sets up a repair stand near a busy trail. Its two trained volunteers have only two hours before the stand must close. In that time, they can either fix four flat tires or adjust two sets of brakes, but not complete both full plans. The club has six spare tubes, yet time at its single stand is scarce. Rubber in the tubes comes from natural resources. The volunteers supply human labor, while the stand and tools are capital resources. All three kinds of resources help produce the repair service.

2. Four cyclists with flats are stranded, while two riders want routine brake adjustments. Each flat repair brings in $12 and uses a $4 tube. Each brake adjustment brings in $20 and uses $2 of supplies. Fixing four flats would leave $32 after those supply costs; adjusting two sets of brakes would leave $36. The club chooses the flats because helping stranded riders fits its mission, even though its earnings after supply costs would be $4 less. Its opportunity cost is the next-best plan, the two brake adjustments it cannot complete.

3. Before the next event, the club considers a $2 discount for riders who reserve a repair time. The lower price is an incentive to book ahead, which could help the club plan how many tubes to bring. One rider may value a quick repair more than keeping the money and choose to pay; another may prefer to fix the tire at home. The club agrees to a repair only if it expects the payment and experience to be worth the tube and volunteer time. When both sides expect to gain, the exchange is voluntary, even if they value the same service differently.

2 ANSWER WITH EVIDENCE

Use the passage

1. The club has six spare tubes. Why can it not complete both full repair plans?

2. What is the opportunity cost of the club's choice, and why does the club accept it?

3. How much more would the brake adjustments leave after supply costs than the flat repairs? What does the club's choice show about how it values the two plans?

4. How might the discount change a rider's behavior? Why would a discounted repair still be a voluntary exchange?

3 YOUR TURN

Your own words

Invent a choice a school group faces when a resource is limited. In four or five sentences, name the scarce resource, two possible uses, the choice and its opportunity cost, one incentive that could change behavior, and a voluntary exchange that both sides expect to benefit from.

ANSWER KEY

The Repair Choice

HIGH SCHOOL · E.C.1

PART 1 · READ AND MARK

Underline the scarce resource, write 1 beside the club's chosen plan and 2 beside its next-best plan, and circle the incentive that could change riders' behavior. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	The club has six spare tubes. Why can it not complete both full repair plans?	**Its volunteers have only two hours at one stand. That scarce time limits how many repairs they can complete, even though they have spare tubes.**
2	What is the opportunity cost of the club's choice, and why does the club accept it?	**The opportunity cost is the two brake adjustments it gives up. The club accepts that cost because helping stranded riders fits its mission.**
3	How much more would the brake adjustments leave after supply costs than the flat repairs? What does the club's choice show about how it values the two plans?	**Brake adjustments would leave $4 more after supply costs, $36 rather than $32. The club values helping stranded riders more than that additional $4.**
4	How might the discount change a rider's behavior? Why would a discounted repair still be a voluntary exchange?	**The discount may encourage a rider to reserve a time. The rider and club would agree to the repair only if each expects to benefit.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Our drama club has $100 left for its show and must choose between printed posters and renting extra lights. We choose posters, so renting the lights is our opportunity cost. A printer offers a discount if we order by Friday, giving us an incentive to decide early. We expect the posters to attract an audience, while the printer expects payment worth its paper and work. Both sides agree to the sale because each expects to benefit.

For the open task, accept a different situation if it identifies a limited resource, a forgone alternative, an incentive, and an exchange both parties expect to benefit from. In question 3, the $4 difference is not itself the opportunity cost.