

Incentives Are All Around Us

Lesson Author

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Standards and Benchmarks (see page 18)

Lesson Description

Students play a game to experience gaining the reward that comes with positive incentives and paying the penalty that comes with negative incentives. Varieties of incentives are introduced to discuss types of incentives, what behavior they are trying to encourage or discourage, and who creates these incentives. After applying their gained knowledge of incentives, students are assessed by creating an incentive following a step-by-step guide and then presenting it to the class.

Grade Level

9–12

Concepts

Benefits

Choice

Costs

Economic incentives (positive and negative)

Objectives

Students will be able to

- distinguish between negative and positive incentives;
- define economic incentives, choice, benefits, and costs;
- identify and explain the particular behavior that an incentive is trying to encourage or discourage; and
- identify the costs and benefits of a decision that is made based on the incentive or disincentive.

Compelling Question

What types of incentives does society create that may change people's behavior in predictable ways?

Time Required

45–60 minutes

Materials

- *Slides 1–6*
- *Handout 1: Letter Choice*, with enough copies to provide one card for each student. Cut out each card so that it can be folded in half along the middle with the letter A on one side and the letter B on the opposite side.
- *Handout 2: Incentives Game Instructions*, one copy for each pair of students
- *Handout 3: Incentives (Draw Pile)*, one copy cut apart for each pair of students (each deck contains 12 incentives)
- *Handout 4: Response Cards for Player 1*, one copy for each pair of students. To differentiate the cards for player one and player two, all the sets for player one in each group can be copied on colored paper.
- *Handout 5: Response Cards for Player 2*, one copy for each pair of students. To differentiate the cards for player one and player two, all the sets for player two in each group can be copied on colored paper that is different from the color used for the player one cards.
- *Handout 5a: Answer Key to Incentives Game*, one copy for the teacher
- *Handout 6: Closure*, one copy for each pair of students
- *Handout 6a: Closure Answer Key*, one copy for the teacher
- *Handout 7: Assessment*, one copy for each pair of students
- Blank paper for each pair of students
- Colored pencils, markers, or crayons for each pair of students
- Enough beans (any type is fine) for each student to have 10 and each pair of students to have 30
- Snack-size plastic zip bags for each student
- One small paper plate for each pair of students

Preparation

- 10 beans inside the snack-size plastic bags for each student
- 30 beans on a paper plate for each pair of students

Procedure

1. Give each student a letter choice card from *Handout 1: Letter Choice*.
2. Display *Slide 2*. Click through each type of incentive and have students hold up their choice cards, either A or B, after you pose each question. As students display their choices, have a few students share why they made that particular choice.
3. Explain that **incentives** are perceived benefits that encourage certain behaviors. Some incentives involve money. Discuss what types of behaviors the following incentives are trying to encourage or discourage:
 - Why would parents offer to pay their kids for good grades? (*Answers will vary but could include "as an incentive for them to do well in school and do their homework."*)
 - What is the incentive to study for a test? (*Answers will vary but could include "to earn a good grade," "to increase an overall grade in a class," "to avoid decreasing an overall grade in a class," or "to demonstrate that you understand the content."*)
 - What is the incentive for a server to be friendly and attentive to the customer? (*Answers will vary but could include "to earn a higher tip," "to earn a raise," "to not get fired," or "to enjoy their job."*)
 - What behavior would threatening drivers with a \$500 ticket for speeding prevent? (*Answers will vary but could include "it might prevent drivers from speeding" or "it could act as an incentive for drivers to drive at the speed limit."*)
4. Explain that these and the incentives in the opening activity cause people to behave in certain ways. In general, people respond to incentives in predictable ways. Thus we can encourage or discourage behaviors through the incentives we offer.
5. Display *Slide 3*. **Positive incentives** are rewards that encourage behaviors that make people better off, and there may be a monetary or measurable reward for doing so.
6. Display *Slide 4*. **Negative incentives (disincentives)** are penalties that are intended to discourage behaviors that make people worse off, and there may be a monetary penalty that must be paid or some other measurable penalty for doing so.

7. Every decision that people make involves weighing the **costs** (things unfavorable to a decision-maker) and **benefits** (things favorable to a decisionmaker) of each option. Positive incentives increase the benefits of one alternative relative to the costs. For example, receiving extra points or money for good grades increases the benefits of studying or doing homework. These incentives make the option of studying more attractive, which encourages people to choose that option. Negative incentives increase the costs of one option relative to the benefits. For example, incurring a loss of driving privileges for not being home at the appointed time increases the cost of staying out past curfew. This makes the option less attractive and may discourage people from choosing that option. Therefore, people respond to incentives. Incentives are usually intended to help people behave in a predictable way.
8. Display *Slides 5–6*. Explain that **economic incentives**, in particular, involve a financial benefit or cost; therefore they can be either positive or negative. Review the examples of economic incentives.
9. Explain that some incentives are put in place by governments at the local, state, or national level. Tax breaks, speeding tickets, and littering fines are examples of incentives created by the government. Other incentives are created by businesses to encourage consumers to purchase certain goods and services. These incentives include buy-one-get-one-free sales, offering two items for a low price, and other discounts.
10. Explain that schools also have several incentives in place that are positive or negative. Discuss examples of incentives in your school, along with the costs and benefits of each. Some examples mentioned may include
 - cell phone policies;
 - tardy policies;
 - recognition and gifts for good grades and/or good behavior; and
 - late work policies.
11. Explain that students will be playing a game with various incentives that students and consumers may face. Some incentives are economic incentives, and some are incentives similar to what they may face in school.
12. Divide students into pairs. Give each pair of students one copy of *Handout 2: Incentives Game Instructions*, one set of cards from *Handout 3: Incentives (Draw Pile)*, one set from *Handout 4: Response Cards for Player 1*, and one set from *Handout 5: Response Cards for Player 2*. Provide a bag of 10 beans for each student and 30 beans on a small plate for each pair of students.
13. Refer students to the directions in Handout 2 and review them as follows:

- Place the cards from the draw pile (Handout 3) in the center between the two players, along with the small plate with 30 beans. Each player should also have 10 beans to start the game.
 - The beans represent the penalty or reward for each incentive. The beans provide an experience of gaining and losing, which is what people have to consider when responding to incentives. In real life, money and other non-monetary incentives are used in place of beans, as is the case in the examples discussed previously.
 - Each player should have one deck of cards (Handouts 4 and 5).
 - Begin the game by having the younger of the two players draw a card from the center pile. The player reads the card aloud. Both players look at their cards and see which response to the incentive matches the one read from the draw pile. For example, if the card reads “Get caught speeding, and you get one expensive ticket,” the players will search for the response card that indicates whether they got caught speeding or not. The players should read their response cards aloud.
 - Follow the instructions on the card. If you are rewarded, take the indicated amount of beans from the center; if you are penalized, you add the indicated amount to the center, taking away from your beans.
 - Take turns drawing cards from the center pile and reading the incentives aloud until every card has been drawn.
 - The player with the most beans when all the incentives cards have been drawn wins the game!
14. Allow students time to play the game. Circle around the room to each group to ensure that the game is being played correctly.
15. Debrief the game by discussing the following:
- What are some examples of positive incentives in the game? (*Discount on insurance for good grades, paycheck for working*)
 - What are some examples of negative incentives in the game? (*Losing points for turning an assignment in late, fines for late library books, fines for littering*)
 - What did losing beans or having to pay an amount of beans represent in the game? (*Losing or paying beans represented the cost of being penalized—for example, if you were caught speeding or not bringing your own shopping bag to the store.*)
 - How were the beans used to represent a positive incentive or reward? (*Earning beans was the reward—for example, going to work and getting paid, doing your homework, or following the speed limit.*)
 - In general, do you think incentives work? (*Answers will vary, but students should see that, in general, incentives work to encourage or discourage behaviors.*)

- Name a positive incentive that your parents use to encourage you to keep your room clean or do other work at home. (*Answers will vary but may include “not getting in trouble,” “having more time to do the things you like,” or “getting an allowance.”*)
 - Name a negative incentive that your parents use to discourage you from skipping class or not being home on time. (*Answers will vary but may include “getting grounded,” “having less time on electronics,” or “having items taken away for a period of time.”*)
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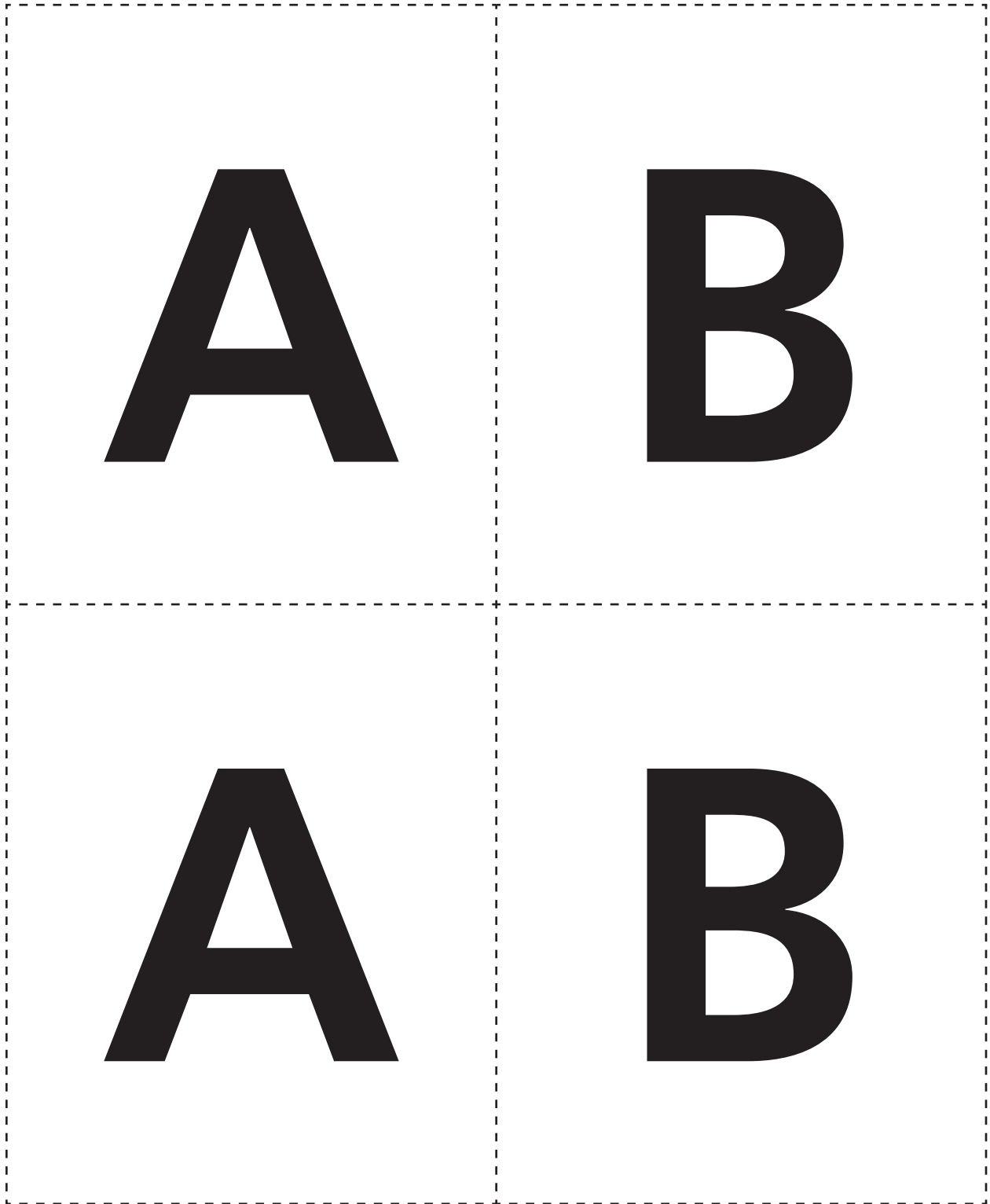
Closure

16. Give a copy of *Handout 6: Closure* to each pair of students. Review the instructions for the activity. Allow students a few minutes to work together to complete the activity. Once students have completed the activity, review the answers. Refer to the teacher key *Handout 6a: Closure Answer Key*.
 - Optional: Project the handout under a document camera and choose one student at a time to come up and fill in the table as the other students provide responses.
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Assessment

17. Have students work in the same groups as they did for the game. Distribute a copy of *Handout 7: Assessment*; crayons, markers, or colored pencils; and a blank sheet of paper. Review the instructions for the assessment with the class. Allow time for the students to work and then have students present their group-created incentive.

Handout 1: Letter Choice



Handout 2: Incentives Game Instructions

- Place the cards from the draw pile (*Handout 3: Incentives*) in the center between the two players, along with the small plate with the 30 beans. Each player should also have 10 beans to start the game.
- The beans represent the penalty or reward for each incentive. The beans provide an experience of gaining and losing, which is what people have to consider when responding to incentives. In real life, money and other non-monetary incentives are used in place of beans, as is the case in the examples discussed previously.
- Each player should have one deck of cards (*Handout 4: Response Cards for Player 1 and Handout 5: Response Cards for Player 2*).
- Begin the game by having the younger of the two players draw a card from the center pile. The player reads the card aloud. Both players look at their cards and see which response to the incentive matches the one read from the draw pile. For example, if the card reads “Get caught speeding, and you get one expensive ticket,” the players will search for the response card that indicates whether they got caught speeding or not. The players should read their response cards aloud.
- Follow the instructions on the card. If you are rewarded, take the indicated amount of beans from the center; if you are penalized, you add the indicated amount to the center, taking away from your beans.
 - Take turns drawing cards from the center pile and reading the incentives aloud until every card has been drawn.
 - The player with the most beans when all the incentives cards have been drawn wins the game!

Handout 3: Incentives (Draw Pile)

Good student discount! Yearly savings on car insurance for good grades (B or above)	Get caught speeding and you get one expensive ticket.	50-point penalty for turning homework in late	Paycheck for working at the Hot Dog Haven
Honor Roll Buffett Lunch	Paying the water bill past the due date will cost you a late fee.	A full ride to a 2-year college for graduating with a 3.5 or above GPA	Get caught littering and you get one expensive ticket.
Discount on health insurance if you go for an annual checkup	The grocery store charges for each plastic bag—unless you bring your own.	Library books should always be returned on time. Every week the book is late means you are fined.	If you earn a passing score on a college-level exam, the school will waive the exam fee. If you do not pass, you will owe the school the exam fee.

Handout 4: Response Cards for Player 1

<p>You graduated with a 3.2 GPA. No full ride to a 2-year college for you! Lose 6 beans.</p>	<p>You earned a D in chemistry and art. You lose the good student discount. Pay 4 beans.</p>	<p>No speeding ticket for you—you drive the speed limit! Earn 5 beans as a reward.</p>	<p>You forgot to schedule your annual physical. The health insurance company increases your insurance costs. You pay 10 beans.</p>	<p>Homework is a priority for you! You always turn it in on time. You get 2 beans as a reward.</p>
<p>You love to buy frozen veggies, but you forgot your reusable grocery bag. You pay 2 beans for the 3 bags you had to use.</p>	<p>You studied very hard for a college-level exam and passed! You earn 4 beans.</p>	<p>Honor Roll Buffet Lunch here you come! You got some tutoring and your grades went up! Get 2 beans.</p>	<p>You worked this week, and that paycheck sure is sweet! Earn 10 beans.</p>	<p>Uh oh. You paid the water bill 5 days after it was due. Pay up 8 beans as the penalty.</p>
<p>You are caught throwing a fast-food wrapper on the ground. An officer fines you! Pay a 5-bean fine for littering.</p>	<p>Returning library books on time is what you are all about. Get 2 beans.</p>			

Handout 5: Response Cards for Player 2

You study hard in high school and graduate with a 3.7 GPA. Get 6 beans.	You earned an A in chemistry and art. You keep the good student discount. Earn 4 beans.	Who said going 20 miles over the speed limit is safe? You get caught and ticketed for speeding! Pay up 5 beans.	You scheduled your annual physical. The health insurance company grants you an annual discount. You earn 10 beans.	Who has time for homework? Not you; your progress report shows a 50-point penalty. You lose 2 beans.
You love to buy frozen veggies and remembered to bring your insulated reusable bag. You earn 2 beans.	Unfortunately, you did not do well on the college-level exam. Pay up 4 beans.	Honor Roll Buffet Lunch here you come! You got some tutoring and your grades went up! Get 2 beans.	You worked this week, and that paycheck sure is sweet! But you decided to call in one day pretending to be sick. You could have earned more. Earn 8 beans.	You paid the water bill on time! Get 8 beans.
You are always sure to throw your trash away properly. No littering fine for you! Get 5 beans.	There's that library book that was due two months ago! Pay the fine of 2 beans.			

Handout 5a: Answer Key to Incentives Game (page 1 of 2)

Handout 3: Incentives	Handout 4: Response Cards	Handout 5: Response Cards
Good student discount! Yearly savings on car insurance for good grades (B or above)	You graduated with a 3.2 GPA. No full ride to a 2-year college for you! Lose 6 beans.	You study hard in high school and graduate with a 3.7 GPA. Get 6 beans.
Get caught speeding and you get one expensive ticket.	You earned a D in chemistry and art. You lose the good student discount. Pay 4 beans.	You earned an A in chemistry and art. You keep the good student discount. Earn 4 beans.
50-point penalty for turning homework in late	No speeding ticket for you—you drive the speed limit! Earn 5 beans as a reward.	Who said going 20 miles over the speed limit is safe? You get caught and ticketed for speeding! Pay up 5 beans.
Paycheck for working at the Hot Dog Haven	You forgot to schedule your annual physical. The health insurance company increases your insurance costs. You pay 10 beans.	You scheduled your annual physical. The health insurance company grants you an annual discount. You earn 10 beans.
Honor Roll Buffett Lunch	Homework is a priority for you! You always turn it in on time. You get 2 beans as a reward.	Who has time for homework? Not you're your progress report shows 50-point penalty. You lose 2 beans.
Paying the water past the due date will cost you a late fee.	You love to buy frozen veggies, but you forgot your reusable grocery bag. You pay 2 beans for the 3 bags you had to use.	You love to buy frozen veggies and remembered to bring your insulated reusable bag. You earn 2 beans.
A full ride to a 2-year college for graduating with a 3.5 or above GPA	You studied very hard for a college-level exam and passed! You earn 4 beans.	Unfortunately, you did not do well on the college-level exam. Pay up 4 beans.
Get caught littering and you get one expensive ticket.	Honor Roll Buffet Lunch here you come! You got some tutoring and your grades went up! Get 2 beans.	Honor Roll Buffet Lunch here you come! You got some tutoring and your grades went up! Get 2 beans.

Handout 5a: Answer Key to Incentives Game (page 2 of 2)

Handout 3: Incentives	Handout 4: Response Cards	Handout 5: Response Cards
Discount on health insurance if you go for an annual checkup	You worked this week, and that paycheck sure is sweet! Earn 10 beans.	You worked this week, and that paycheck sure is sweet! But you decided to call in one day pretending to be sick. You could have earned more. Earn 8 beans.
The grocery store charges for each plastic bag—unless you bring your own.	Uh oh. You paid the water bill 5 days after it was due. Pay up 8 beans as the penalty.	You paid the water bill on time! Get 8 beans.
Library books should always be returned on time. Every week the book is late means you are fined.	You are caught throwing a fast food wrapper on the ground. An officer fines you! Pay a 5 bean fine for littering.	You are always sure to throw your trash away properly. No littering fine for you! Get 5 beans.
If you earn a passing score on a college-level exam, the school will waive the exam fee. If you do not pass, you will owe the school the exam fee.	Returning library books on time is what you are all about. Get 2 beans.	There's that library book that was due two months ago! Pay the fine of 2 beans.

Handout 6: Closure

Incentive	Positive or negative?	What type of behavior is the incentive trying to encourage or discourage?	Who would create an incentive like this? The government, a business, or a school?	Economic incentive? Indicate (Y) for yes and (N) for no.
Good student discount! Yearly savings on car insurance for good grades (B or above)				
Get caught speeding and you get one expensive ticket.				
50-point penalty for turning homework in late				
Paycheck for working at the Hot Dog Haven				
Honor Roll Buffett Lunch				
The grocery store charges for each plastic bag—unless you bring your own.				
A full ride to a 2-year college for graduating with a 3.5 or above GPA				

Handout 6a: Closure Answer Key

Incentive	Positive or negative?	What type of behavior is the incentive trying to encourage or discourage?	Who would create an incentive like this? The government, a business, or a school?	Economic incentive? Indicate (Y) for yes and (N) for no.
Good student discount! Yearly savings on car insurance for good grades (B or above)	Positive	Encouraging students who drive to do well in school. As an incentive, they save on car insurance.	A business, perhaps in collaboration with schools	Yes, because there is a financial incentive
Get caught speeding and you get one expensive ticket.	Negative	Discouraging people from speeding by associating it with a high cost.	Local governments in a city would get together with the local police office to create it.	Yes, because there is a financial cost involved
50-point penalty for turning homework in late	Negative	It is a disincentive for turning homework in late.	Schools	No, there is no financial benefit or cost
Paycheck for working at the Hot Dog Haven	Positive	Encouraging people to go to work by offering them the incentive of earning money.	Businesses pay people for their work.	Yes, because there is a financial incentive
Honor Roll Buffett Lunch	Positive	Encouraging students to get good grades	Schools	No, there is no immediate financial benefit or cost to the student
The grocery store charges for each plastic bag—unless you bring your own.	Negative	Encouraging customers to bring their own reusable bags and save on waste	Businesses and, in some places, governments	Yes, because there is a financial cost
A full ride to a 2-year college for graduating with a 3.5 or above GPA	Positive	Encouraging students to do well during their 4 years of high school and earn a scholarship	Typically schools along with governments, such as the state's Department of Education.	Yes, there is a financial benefit of savings on college costs

Handout 7: Assessment (page 1 of 2)

Working with the same partner as you did when you played the game, you will create a positive or negative incentive. Think of a behavior within your school or society in general that the group believes could be persuaded to change through some type of incentive. Use this sheet to create your incentive or disincentive. Follow the directions in each step carefully.

Step 1: Discuss as a group what behavior you would like to possibly change. Fill in the spaces below with three ideas that your group comes up with, and then circle your final decision.

- _____
- _____
- _____

Step 2: Discuss and write down at least three different incentives (positive or negative) that could result in the predicted behavior. Make sure that the reward or penalty is explained or defined clearly. Indicate whether the incentive is monetary or non-monetary. Circle the final choice the group decided on.

- _____
- _____
- _____

Step 3: Explain why the incentive is positive or negative.

Step 4: Every incentive involves making a choice between some options. Explain these options here.

Handout 7: Assessment (page 2 of 2)

Step 5: On a blank sheet of paper. Come up with an illustration that explains your incentive. The illustration should clearly show what the incentive is, and if there is a reward or penalty. You will share your incentive with the class.

Standards and Benchmarks

Voluntary National Content Standards in Economics

Content Standard 1: Scarcity

- **Benchmark: Grade 8**
 3. The choices people make have both present and future consequences.
- **Benchmark: Grade 12**
 1. Choices made by individuals, firms, or government officials are constrained by the resources to which they have access.

Content Standard 4: Incentives

- **Benchmark: Grade 8**
 1. Responses to incentives are usually predictable because people normally pursue their self-interest or deviate from their self-interest in consistent ways.
 2. Changes in incentives usually cause people to change their behavior in predictable ways.
 3. Incentives can be monetary or non-monetary, or both.
- **Benchmark Grade 12**
 1. Acting as consumers, producers, workers, savers, investors, and citizens, people respond to incentives in order to allocate their scarce resources in ways that provide them the highest possible net benefits.