# Professional Baseball—Can You Join the League? 

## Lesson Author

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The author thanks Dr. Paul Grimes for his assistance in the development of this lesson plan. Portions of this lesson were inspired by the following book: Register, Charles and Grimes, Paul. Economics of Social Issues. 21st Edition. New York: McGraw Hill Education, 2016.

## Standards and Benchmarks (see page 21)

## Lesson Description

Students apply economic concepts to a professional baseball league. The lesson underscores the importance of incentives, control of supply, and potential market inefficiencies resulting from a cartel. Students assume one of two roles: either (i) a member of a team owner group trying to get its team into the Professional Baseball League or (ii) a member of the Professional Baseball League Expansion Committee deciding whether new teams are admitted.

## Grade Level

9-12
Advanced Placement Economics

## Concepts

Cartel
Market structures
Profit maximization

## Prior Content Knowledge Required

Supply and demand
Incentives
Market efficiency
Market structures and competition
Monopoly
Oligopoly

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## Compelling Question

How does economic competition affect professional sports leagues and teams?

## Objectives

Students will be able to

- recognize competition and incentives in professional sports,
- describe a cartel,
- describe a monopoly,
- explain how professional leagues exhibit behaviors of a cartel and a monopoly, and
- interpret the interdependent relationship between a professional sports league and the individual teams in that league.


## Time Required

75-90 minutes

## Materials

- Visual 1: League Restrictions
- Visual 2: Market Structures
- Visual 3: The Case of Baseball-Why and How
- Visual 4: League Success
- Handout 1: League Expansion Committee Instructions, one copy for each of three or four committee members
- Step 6, Option 1: Handout 2.1: Team Roster, one copy for each student OR
Step 6, Option 2: Handout 2.2: Team Roster from Baseball Cards, one copy for each student
- Handout 3: Assessment, one copy for each student
- Handout 3: Assessment—Answer Key
- Calculators (optional)
- Baseball cards (for Option 2 in Step 6; see the Preparation section for details)


## Preparation (For Option 2 in Step 6 only)

For each of three or four owner groups (or more if desired), prepare sets of baseball cards with the following types and numbers of cards. NOTE: If desired or necessary given the number of cards available, allow students to use infield or outfield players for any infield or outfield position.

Pitchers: At least 8 (owner groups will choose 4)
Catchers: At least 4 (owner groups will choose 2)
First base: At least 4 (owner groups will choose 2)
Second base: At least 4 (owner groups will choose 2)
Third base: At least 4 (owner groups will choose 2)
Shortstop: At least 4 (owner groups will choose 2)
Outfield: At least 8 (owner groups will choose 4)

## Procedure

1. Introduce the topic by asking students to share their preferred sports and to name some of their favorite professional teams. (Answers will vary.)
2. Ask students for examples of economic decisions professional sports teams face. (Answers will vary but may include personnel decisions, stadium maintenance or construction, vending choices, or team merchandise selection.)
3. Explain to the students that to better understand economic decisions in sports, they will participate in a role play activity and will act as either

- members of a team owner group trying to get their team accepted into the Professional Baseball League or
- members of the Professional Baseball League Expansion Committee deciding which new teams to accept into the league.

4. Ask the class who among them understands baseball statistics including earned run average (ERA) and batting average. Choose three or four of these students to be the League Expansion Committee. Have them assemble apart from the rest of the class and distribute to each committee member a copy of Handout 1: League Expansion Committee Instructions and the handout for the option chosen in step 6 (so they know the teams' procedures). Quietly make the following clear to the League Expansion Committee: They are not to show Handout 1 or discuss the restrictions with any of the team owners at any time during the role play. Ask the League Expansion Committee members to read Handout 1 silently and wait for further instructions.

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5. Choose three or four students who understand ERA and batting average to lead team owner groups and divide the remaining students among the team owner groups.
6. Choose one of the following options:

Option 1: Distribute a copy of Handout 2.1: Team Roster to each student in the team owner groups. Invite students to read the directions aloud.

Option 2: Distribute a copy of Handout 2.2: Team Roster from Baseball Cards to each student in the team owner groups. Invite students to read the directions aloud.

NOTE for Option 2: The restrictions that no more than two pitchers may have an earned run average (ERA) less than 3.00 and that no more than four players may have a batting average over . 300 might not work well if you are using Option 2 (baseball cards). Depending on the player statistics on the cards you provide, you may need to adjust the ERA and batting-average thresholds for the activity to work best. If you adjust the thresholds, you will also need to note them on Handout 1, Visual 1, and Handout 2.2. As noted in the Preparation section, you may want to allow students to use infield or outfield players for any infield or outfield position.
7. Explain to the students that once each owner group completes its team lineup, it will send its leader to the League Expansion Committee to present the lineup for consideration. The league will accept only two new teams for the coming season.
8. If there are no questions, instruct the owner groups to create their team roster.
9. Once owner groups begin working on their lineup, meet with the League Expansion Committee privately. Explain that it is unlikely any teams will be accepted on the first attempt. The owners will try to create the best teams possible, but the league should try to create the best league possible. Remind them not to disclose the restrictions on Handout 1 or give away that it is difficult to be accepted into the league. They are to say only vague, general things (as noted on Handout 1) when reviewing the lineups.

NOTE: Some team leaders will recognize the replies as restrictions in terms they have heard such as a "salary cap" or "luxury tax." Quietly ask those students to hold their thoughts until the end-perhaps call on them during the discussion. If team groups ask about their budget, tell them they are not given a specific amount; the owners will pool resources to meet the expenses. Some students will be frustrated by not being accepted into the league. (This activity can get chaotic!) Watch for this and keep things calm, checking on groups as they work.
10. Allow groups to present a lineup to the League Expansion Committee at least once, time permitting. Once two teams have been accepted or two to three groups have presented to the League Expansion Committee a second time, stop and debrief the activity by discussing the following:

- How many teams were accepted into the league on the first attempt? (Answers will vary, but most likely one or none).


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- Why was it hard to get a team accepted? (Answers will vary but may include player restrictions or terms they have heard such as salary cap or luxury tax.)
- How did the incentives of the team owner groups and League Expansion Committee differ? (Answers will vary, but the team owner groups acted in their own best interest and tried to create the best team possible to maximize profits. The committee acted in the league's best interest by placing restrictions on teams to maximize collective profits and league success.)

11. Display Visual 1: League Restrictions, read the restrictions, and then discuss the following:

- Who were the players you wanted to keep but had to remove from your roster? (Answers will vary.)
- Why did you choose those players for your team? (Answers will vary.)
- How might losing those players affect your team's performance? (Answers will vary but may include that the team may not perform as well without the players.)
- Why would the league implement and enforce the restrictions? (Answers will vary but may include the following: The league does not want the best players on only a few select teams. Owners do not want to compete with each other on player salaries. The league does not want one or a few dominant teams, because the league will not do as well.)

12. Display Visual 2: Market Structures and review the definitions as a class. Explain that unlike other businesses, baseball is exempt from anti-trust laws. The commissioner can act in the best interest of the league, not the individual teams.
13. Display Visual 3: The Case of Baseball-Why and How, invite students to read it, and then explain the following:

- Baseball and other leagues are different from collusive oligopolies, as leagues are highly formalized and the market outcome is that of a shared monopoly.
- Baseball's legal exemption from anti-trust laws allows it to behave as a cartel even though cartels are illegal in other markets in the United States.
- By acting as a cartel and keeping teams somewhat evenly matched, a league is able to accomplish the shared-monopoly outcome and maximize the collective profits of the league.

14. Display Visual 4: League Success, invite students to read it, and then discuss the following:

- How does limiting the number of teams and the Competitive Balance Tax help the league? (Fewer teams can mean higher profits for the league from ticket sales, merchandise sales, and the like. The Competitive Balance Tax attempts to keep payrolls within limits that prevent a single team from becoming "too good" by paying the highest salaries.)


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15. Explain that restrictions allow sports leagues to operate as cartels and control the supply of teams. Salary caps, luxury taxes, and other barriers prevent market entry and competition.

NOTE: This is an excellent opportunity for a side-by-side comparison graph of perfect competition and monopoly (cartel) outcomes. It will show the differences in allocative efficiency and deadweight loss in terms of prices and the number of teams.

## Closure

16. Review the main points of the lesson by discussing the following:

- In which market structure does Major League Baseball operate? (A cartel or shared monopoly)
- Why is professional baseball allowed to operate as a cartel or monopoly? (Professional baseball was ruled exempt from anti-trust laws in 1922.)
- How do sports cartels succeed?
(1. Cartels control output-members agree to the terms of the cartel.

2. Cartel members produce a similar product.
3. Cartels divide the market and limit the number of teams.
4. Cartels prevent cheating with rules [salary caps, luxury taxes, etc.]. ${ }^{1}$ )

- How does maintaining a shortage and minimum expansion help a sports league and its teams? (Answers will vary but may include the following: Shortages can keep ticket and merchandise prices higher. For teams, there may be an incentive to move if tax-paying fans are willing to build new stadiums under the threat of their team leaving. From 2000 to 2010, $\$ 10$ billion was spent on new stadiums. Half of the funding came from public sources. ${ }^{2}$ )

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## Visual 1: League Restrictions

A team must replace players until the following restrictions are met:

1. The payroll may not exceed $\$ 25,000,000$.
2. No more than 2 pitchers may have an ERA less than 3.00.
3. No more than 4 players may have a batting average over 300.

## Visual 2: Market Structures

Monopoly—A firm that is the only seller of a product that lacks close substitutes; a market structure with very few sellers, which enables each seller to affect the total supply and the price of the good or service.

Examples: Utilities such as electricity, water, and natural gas. Utilities are often given exclusive rights by the government to provide these services and must follow government regulations.

Oligopoly-A market structure with few firms and a market that is difficult to enter. The firms sell either a standardized or differentiated product, and there is usually non-price competition. Individual firms have little control over product prices because of mutual interdependence, unless cooperation or collusion occurs among firms.

Examples: Car manufacturers, cell phone providers, airlines, computer software companies, and oil producers.

Collusion-When competing firms agree to work together (collude) to fix prices, share a market through production decisions, or otherwise limit competition. Firms may agree to work together, but individual firms can produce more than the agreed-upon quantity in an attempt to increase profits.

Example: Two competing software companies agree to charge a certain price for their respective, competing products.

Cartel—A group of businesses (firms) that formally agree to coordinate their production and pricing decisions in a manner that maximizes joint profits. Such an arrangement is more formal than collusion. Like colluding oligopolies, individual firms can produce more than the agreed-upon quantity in an attempt to increase profits.

Examples: OPEC (Organization of Petroleum Exporting Countries) and Major League Baseball.

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## Visual 3: The Case of Baseball-Why and How

## Why?

Professional baseball was ruled exempt from anti-trust laws in 1922.
FEDERAL BASEBALL CLUB OF BALTIMORE, INC. v. NATIONAL LEAGUE OF PROFESSIONAL BASEBALL CLUBS, ET AL. No. 204. Supreme Court of the United States. Argued April 19, 1922. Decided May 29, 1922. ${ }^{3}$

- The ruling allows the league to coordinate and cooperate to maximize joint profits, forming a cartel. A successful cartel has a similar market outcome as a monopoly.
- Professional sports leagues act as cartels (or a shared monopoly).


## How?

Professional baseball's shared-monopoly outcome is accomplished by the following:

- All teams are bound together contractually through the league office.
- The coordinated behavior among teams is much more than simple collusion.
- Teams collectively hire a commissioner to make sure everyone obeys the same set of rules.
- The commissioner has enforcement power over those who misbehave and try to cheat on contractual agreements.
- The formal agreements that tie the teams together result in a cartel (football, basketball, and other sports leagues are similar).

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## Visual 4—League Success (page 1 of 2)

## How do cartels succeed?

1. Cartels must control output-members agree to the terms of the cartel.
2. Cartel members must produce a similar product (e.g., sports or oil).
3. Cartels must divide the market and establish production quotas (e.g., a limited number of products or teams).

## Example: Major League Baseball (MLB)

- MLB keeps expansion minimal—it limits the number and locations of teams.

Economists say 50 locations could support professional baseball teams. ${ }^{4}$ There are currently 30 MLB teams ${ }^{5}$; thus, there is a shortage of teams.

- Limited teams create an incentive for teams to move. Tax-paying fans are willing to build new stadiums under the threat of their team leaving. From 2000 to $2010, \$ 10$ billion was spent on new stadiums. Half of the funding came from public sources. ${ }^{6}$

4. Cartels must prevent cheating through rules (e.g., MLB rules control most aspects of the league, including payroll, drafting, and trading of players).

## Example: MLB Competitive Balance Tax ${ }^{7}$

Each year, clubs that exceed a predetermined payroll threshold are subject to a competitive balance tax, commonly called a "luxury tax." Those who carry payrolls above that threshold are taxed on each dollar above the threshold, with the tax rate increasing based on the number of consecutive years a club has exceeded the threshold.

The threshold was $\$ 189$ million from 2014-16, but the following increases were put into place per the 2017-21 Collective Bargaining Agreement:

2017: \$195 million
2018: \$197 million
2019: \$206 million
2020: \$208 million
2021: \$210 million

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## Visual 4—League Success (page 2 of 2)

Exceeding the threshold is subject to the following taxes:

- First time, 20 percent tax on all overages
- Second consecutive season, 30 percent tax on all overages
- Third and any additional consecutive seasons, 50 percent tax on all overages

If a club dips below the luxury tax threshold for a season, the penalty level is reset.
Clubs that exceed the threshold are also subject to the following surtaxes:

- $\quad \$ 20$ million to $\$ 40$ million over, 12 percent surtax
- $\$ 40$ million or more over, 42.5 percent surtax the first time
- $\$ 40$ million or more over again the following year(s), 45 percent surtax

Beginning in 2018, clubs that are $\$ 40$ million or more above the threshold will have their draft pick moved back as well.

## Handout 1: League Expansion Committee Instructions (page 1 of 3)

IMPORTANT: Do not let the team owners see this form. They are not aware of the restrictions, so do not share the restrictions with them at any time during the role play.

## League Restrictions

A team must replace players until the following restrictions are met:

1. The payroll may not exceed $\$ 25,000,000$.
2. No more than 2 pitchers may have an ERA less than 3.00.
3. No more than 4 players may have a batting average over . 300 .

Role: You are a member of the League Expansion Committee, which operates as a cartel. As a cartel, you have market power and wish to restrict additional competitors from entering the league while also maintaining competition within the league.

Directions: Review the team rosters provided by each owner group. Use the charts on pages 2 and 3 to evaluate the rosters. Teams must meet all three criteria to be eligible to enter the league. Select two teams to enter the league.

The economic incentives of the owners and the committee differ. The owner groups want to create the best teams possible to maximize profits, so they will each behave in their own best interest. The committee wants to create the best league possible to maximize collective profits, so you are to behave in the best interest of the league. It is not likely any team will be accepted on the first attempt because it will be trying to create the best team possible. This represents the different incentives owners face in contrast to the League Expansion Committee as a group.

Do not give away that it is difficult to be accepted into the league. Say vague, general things to the owners when they present their rosters. Examples include the following:

- "You'll have to replace this pitcher."
- "This hitter has to be replaced."
- "This player is paid too much."
- "These two pitchers can't both be on your team."
- "You can keep one of these players, but not both."


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## Handout 1: League Expansion Committee Instructions (page 2 of 3)

| Team: | Proposal 1 | Proposal 2 |
| :--- | :--- | :--- |
| 1. Team payroll \$25,000,000 or less |  |  |
| 2. No more than 2 pitchers with ERA < 3.00 |  |  |
| Pitcher 1 |  |  |
| Pitcher 2 |  |  |
| 3. No more than 4 players with batting average > .300 |  |  |
| Batter 1 |  |  |
| Batter 2 |  |  |
| Batter 3 |  |  |
| Batter 4 |  |  |


| Team: | Proposal 1 | Proposal 2 |
| :--- | :--- | :--- |
| 1. Team payroll \$25,000,000 or less |  |  |
| 2. No more than 2 pitchers with ERA < 3.00 |  |  |
| Pitcher 1 |  |  |
| Pitcher 2 |  |  |
| 3. No more than 4 players with batting average > .300 |  |  |
| Batter 1 |  |  |
| Batter 2 |  |  |
| Batter 3 |  |  |
| Batter 4 |  |  |

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## Handout 1: League Expansion Committee Instructions (page 3 of 3)

| Team: | Proposal 1 | Proposal 2 |
| :--- | :--- | :--- |
| 1. Team payroll \$25,000,000 or less |  |  |
| 2. No more than 2 pitchers with ERA < 3.00 |  |  |
| Pitcher 1 |  |  |
| Pitcher 2 |  |  |
| 3. No more than 4 players with batting average > .300 |  |  |
| Batter 1 |  |  |
| Batter 2 |  |  |
| Batter 3 |  |  |
| Batter 4 |  |  |


| Team: | Proposal 1 | Proposal 2 |
| :--- | :--- | :--- |
| 1. Team payroll \$25,000,000 or less |  |  |
| 2. No more than 2 pitchers with ERA < 3.00 |  |  |
| Pitcher 1 |  |  |
| Pitcher 2 |  |  |
| 3. No more than 4 players with batting average > .300 |  |  |
| Batter 1 |  |  |
| Batter 2 |  |  |
| Batter 3 |  |  |
| Batter 4 |  |  |

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## Handout 2.1: Team Roster (page 1 of 2)

## Team name:

$\qquad$

Role: You are a group of profit-maximizing entrepreneurs. You are pooling assets and investing in a baseball expansion team and hope to enter the Professional Baseball League next season. You have a list of available baseball players. Create a lineup of 18 players according to the specifications on the chart below. Choose your players, add the salaries, calculate the total team payroll, choose a team name, and send your group leader to present your proposal to the League Expansion Committee. Based on the players' statistics, select the team you think will maximize your profits.

Earned run average (ERA)-A measure of pitching performance. ERA is calculated as the average number of earned runs opposing teams score in each nine innings pitched. The lower the number, the fewer runs the pitcher allows per nine innings. Only pitchers have an ERA.

Batting average (AVG)—A measure of batting performance. A ratio of a batter's safe hits per official times at bat. The higher the number, the more frequently the batter reaches base safely. (NOTE: AVGs are not provided below for pitchers.)

| Name | Position | AVG | ERA | Salary | Selected |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Pitchers: Choose 4 |  |  |  |  |  |
| A. Amdahl | Pitcher | - | 1.95 | $\$ 3,000,000$ |  |
| D. Hopkins | Pitcher | - | 2.58 | $\$ 3,000,000$ |  |
| K. Roberts | Pitcher | - | 4.15 | $\$ 2,000,000$ |  |
| E. Suiter | Pitcher | - | 2.26 | $\$ 2,000,000$ |  |
| D. Marks | Pitcher | - | 4.91 | $\$ 2,000,000$ |  |
| W. Cook | Pitcher | - | 2.79 | $\$ 3,000,000$ |  |
| V. Bock | Pitcher | - | 3.67 | $\$ 2,500,000$ |  |
| S. Brad | Pitcher | - | 3.12 | $\$ 2,500,000$ |  |
|  |  |  |  |  |  |
| Catchers: Choose 2 |  |  | Total salaries |  |  |
| L. Andrews | Catcher | .301 | - | $\$ 3,000,000$ |  |
| S. Johnston | Catcher | .288 | - | $\$ 2,000,000$ |  |
| J. Peck | Catcher | .236 | - | $\$ 1,000,000$ |  |
| B. Severs | Catcher | .350 | - | $\$ 3,000,000$ |  |

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Handout 2.1: Team Roster (page 2 of 2)

| Name | Position | AVG | ERA | Salary | Selected |
| :--- | :---: | :---: | :---: | :---: | :---: |
| First base: Choose 2 |  |  |  |  |  |
| R. Mills | 1st base | .261 | - | $\$ 2,000,000$ |  |
| N. Guerrero | 1st base | .238 | - | $\$ 1,000,000$ |  |
| M. Felder | 1st base | .308 | - | $\$ 3,000,000$ |  |
| O. Bergis | 1st base | .325 | - | $\$ 3,000,000$ |  |
|  |  |  |  | Total salaries |  |

Second base: Choose 2

| T. Oliver | 2nd base | .248 | - | $\$ 1,000,000$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| B. Sanchez | 2nd base | .273 | - | $\$ 2,000,000$ |  |
| L. Williams | 2nd base | .221 | - | $\$ 1,000,000$ |  |
| V. Thomas | 2nd base | .288 | - | $\$ 2,000,000$ |  |
|  |  |  |  | Total salaries |  |

Third base: Choose 2

| P. Davies | 3rd base | .268 | - | $\$ 2,000,000$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| A. Curtis | 3rd base | .327 | - | $\$ 3,000,000$ |  |
| N. Alman | 3rd base | .338 | - | $\$ 3,000,000$ |  |
| C. Scott | 3rd base | .198 | - | $\$ 1,000,000$ |  |
|  |  |  |  | Total salaries |  |

## Shortstop: Choose 2

| R. Jefferson | Shortstop | .233 | - | $\$ 1,000,000$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| S. Smith | Shortstop | .251 | - | $\$ 2,000,000$ |  |
| I. Skoglund | Shortstop | .268 | - | $\$ 2,000,000$ |  |
| B. Brown | Shortstop | .302 | - | $\$ 3,000,000$ |  |
|  |  |  |  | Total salaries |  |

## Outfield: Choose 4

| Y. Jones | Outfield | .326 | - | $\$ 3,000,000$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| T. Meyer | Outfield | .288 | - | $\$ 2,000,000$ |  |
| R. Lynn | Outfield | .287 | - | $\$ 2,000,000$ |  |
| M. Hickman | Outfield | .273 | - | $\$ 2,000,000$ |  |
| H. Bryan | Outfield | .234 | - | $\$ 1,000,000$ |  |
| A. Lee | Outfield | .323 | - | $\$ 3,000,000$ |  |
|  |  |  |  | Total salaries |  |
|  |  |  | Total team payroll |  |  |

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## Handout 2.2: Team Roster from Baseball Cards (page 1 of 2)

Team name: $\qquad$

Role: You are a group of profit-maximizing entrepreneurs. You are pooling assets and investing in a baseball expansion team and hope to enter the Professional Baseball League next season. The baseball cards you have received are your list of available baseball players. Use the chart on page 2 and the pay structure below to create a lineup of 18 players. Use each player's total career statistics, found in the bottom right-hand corner of most baseball card brands, to determine the player's earned run average (ERA) or batting average (AVG) (defined below).

Choose your players, add the salaries, calculate the total team payroll, choose a team name, and send your group leader to present your proposal to the League Expansion Committee. Based on the players' statistics, select the team you think will maximize your profits.

Earned run average (ERA)—A measure of pitching performance. ERA is calculated as the average number of earned runs opposing teams score in each nine innings pitched. The lower the number, the fewer runs the pitcher allows per nine innings. Only pitchers have an ERA.

Batting average (AVG)—A measure of batting performance. A ratio of a batter's safe hits per official times at bat. The higher the number, the more frequently the batter reaches base safely. (NOTE: AVGs are not provided below for pitchers.)

| Baseball Card Pay Structure |  |
| :---: | :---: |
| Pitchers | Salary |
| ERA $<3.00$ | $\$ 3,000,000$ |
| ERA 3.00 to 4.00 | $\$ 2,000,000$ |
| ERA $>4.00$ | $\$ 1,000,000$ |
| Position Players | Salary |
| Batting average .300 or higher | $\$ 3,000,000$ |
| Batting average .250 to .299 | $\$ 2,000,000$ |
| Batting average $<.250$ | $\$ 1,000,000$ |

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## Handout 2.2: Team Roster from Baseball Cards (page 2 of 2)

| Name | Position | AVG | ERA | Salary |
| :---: | :---: | :---: | :---: | :---: |
| Pitchers: Choose 4 |  |  |  |  |
|  | Pitcher | - |  |  |
|  | Pitcher | - |  |  |
|  | Pitcher | - |  |  |
|  | Pitcher | - |  |  |
|  |  |  | Total salaries |  |
| Catchers: Choose 2 |  |  |  |  |
|  | Catcher |  | - |  |
|  | Catcher |  | - |  |
|  |  |  | Total salaries |  |
| First base: Choose 2 |  |  |  |  |
|  | 1st base |  | - |  |
|  | 1st base |  | - |  |
|  |  |  | Total salaries |  |
| Second base: Choose 2 |  |  |  |  |
|  | 2nd base |  | - |  |
|  | 2nd base |  | - |  |
|  |  |  | Total salaries |  |
| Third base: Choose 2 |  |  |  |  |
|  | 3rd base |  | - |  |
|  | 3rd base |  | - |  |
|  |  |  | Total salaries |  |
| Shortstop: Choose 2 |  |  |  |  |
|  | Shortstop |  | - |  |
|  | Shortstop |  | - |  |
|  |  |  | Total salaries |  |
| Outfield: Choose 4 |  |  |  |  |
|  | Outfield |  | - |  |
|  | Outfield |  | - |  |
|  | Outfield |  | - |  |
|  | Outfield |  | - |  |
|  |  |  | Total salaries |  |
|  |  | Total team payroll |  |  |

## Handout 3—Assessment

Name: $\qquad$

Directions: Answer the following questions:

1. List two of the criteria required for a cartel to be successful.
2. How do economic incentives differ for a sports-league cartel and the team owners?
3. Predict what might happen if professional baseball were left to a more competitive market.
4. Describe how a sports-league cartel and the individual teams benefit one another.

## Handout 3: Assessment—Answer Key

## Answer the following questions:

1. List two of the criteria required for a cartel to be successful.

- Cartels must control output-members agree to the terms of the cartel.
- Cartel members must produce a similar product.
- Cartels must divide the market and establish production quotas.
- Cartels must prevent cheating through rules.

2. How do economic incentives differ for a sports-league cartel and the team owners?

Team owners want to field the best possible team, but the cartel wants the league to succeed. If a single team becomes too dominant, the league will not do as well and fans could lose interest, lowering collective profits.
3. Predict what might happen if professional baseball were left to a more competitive market. Answers will vary, but larger cities would likely have more teams. New locations might get teams as well. Teams would be able to spend more on payroll, possibly pushing less competitive teams out of the business. Additional leagues could form in areas with excess demand for baseball.
4. Describe how a sports-league cartel and the individual teams benefit each another.

Answers will vary but may include the following: Cartel rules, such as the Competitive Balance Tax, keep teams evenly matched. The cartel maintains a team shortage, keeping ticket and merchandise prices higher than they would be in a more competitive market.

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## Standards and Benchmarks

## National Standards in Economics

Standard 9: Competition among sellers usually lowers costs and prices, and encourages producers to produce what consumers are willing and able to buy. Competition among buyers increases prices and allocates goods and services to those people who are willing and able to pay the most for them.

- Benchmark 2, Grade 12: The level of competition in an industry is affected by the ease with which new producers can enter the industry, and by consumers' information about the availability, price and quantity of substitute goods and services.
- Benchmark 4, Grade 12: Collusion among buyers or sellers reduces the level of competition in a market. Collusion is more difficult in markets with large numbers of buyers and sellers.


## Common Core State Standards: English Language Arts, Grades 9-12

Writing

- Text Types and Purposes

CCSS.ELA-LITERACY.W.9-10.1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

CCSS.ELA-LITERACY.W.9-10.1.A: Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relation-ships among claim(s), counterclaims, reasons, and evidence.

CCSS.ELA-LITERACY.W.11-12.1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

CCSS.ELA-LITERACY.W.11-12.1.A: Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences claim(s), counterclaims, reasons, and evidence.


[^0]:    ${ }^{1}$ Register and Grimes. Economics of Social Issues. pp. 231-239.
    ${ }^{2}$ Register and Grimes. Economics of Social Issues. p. 238.

[^1]:    ${ }^{3}$ JUSTIA US Supreme Court. Federal Baseball Club v. National League, 259 U.S. 200 (1922);
    https://supreme.justia.com/cases/federal/us/259/200/case.html, accessed November 15, 2017.

[^2]:    ${ }^{4}$ Register and Grimes. Economics of Social Issues. p. 238.
    ${ }^{5}$ MLB.com. Team-by-Team Information; http://mlb.mlb.com/team/index.jsp; accessed December 1, 2017.
    ${ }^{6}$ Register and Grimes. Economics of Social Issues. p. 238.
    ${ }^{7}$ MLB.com. Glossary: http://m.mlb.com/glossary/transactions/competitive-balance-tax, accessed September 20, 2017.

