



Lesson 2 – Pre-Visit Big Business of the Big Leagues

Objective: Students will be able to:

- Identify several sources of revenue for Major League Baseball teams.
- Use math skills to estimate team revenue from ticket sales.
- Locate and compare information found in tables and charts.

Time Required: 1 class period

Materials Needed:

- Ticket Revenue Worksheets (Included) – 1 for each student
- Teacher Answer Key (Included)
- 2011 Average Team Salaries Page (Included) – 1 for each student
- Calculators

Vocabulary:

Concessions - A space within a building or area for an additional business or service

Licensed Good - Any item that reproduces a corporate logo with permission from the corporation

Network - A company or organization that provides programs to be broadcast over radio or television transmitting stations

Payroll – A list of all employees to be paid by a company, and the total of the amount due to each

Profit – Money earned by a business after all operating expenses have been met

Profitable – Resulting in profit

Revenue – A sum of money regularly coming in to a business



Applicable Common Core State Standards:

CCSS.ELA-Literacy.RI.6.7 Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

CCSS.ELA-Literacy.W.6.4, W.7.4, W.8.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

CCSS.Math.Content.6.NS.B.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

CCSS.Math.Content.6.SP.A.1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.



Lesson

1. To begin this lesson, discuss that a professional sports team's success can be judged in a number of ways. For example, in baseball, a team's success can be determined by the number of games (or World Series Championships) they have won.
2. Explain that professional sports are also businesses, therefore, the success of a sports team can be determined by looking at how profitable the team is.
3. Review that **profit** = total revenue – total cost.
4. Teams clearly spend a lot of money. In fact, they spend millions of dollars on player salaries alone. However, to be successful businesses, the teams must earn more than they spend. Ask students, "How do you think Major League Baseball teams earn revenue?"
5. Explain that there are three main sources of revenue for MLB teams:

I. Media Contracts:

Television, cable, and radio networks pay sports leagues for the rights to broadcast games. The networks then sell commercial time on their stations to advertisers. When more people watch the games, advertisers are willing to pay higher rates for commercial time because their ads are reaching more potential customers.

II. Licensed Goods:

This category includes caps, jerseys, computer games, posters...basically anything that reproduces a team logo with official permission from that team.



III. Ticket Sales and Stadium Revenues:

This category includes concessions, luxury suites, ticket sales, and stadium naming rights.

- Concessions: Often, baseball teams will rent food and souvenir concession areas to other companies who provide their own supplies and staff. The team gets to keep some of the profits earned from concessions sales, and the rest of the profits are kept by the companies that run the concessions areas.
- Luxury Suites: Typical suites accommodate anywhere from 10 to 20 people, although some hold more, and they offer services that fans sitting in regular seats can't always get – like catered dinners. Some suites sell for \$250,000 to \$500,000 each. In order to earn the same amount of money selling regular tickets at \$25 each, a team would have to sell 12,500 tickets. According to most estimates, luxury suites bring in anywhere from 5 to 15% of a team's revenue.
- Ticket Sales: These are single-game tickets that fans purchase at the stadium or at other ticket outlets such as team websites.
- Season Tickets: Fans pay for these tickets before the start of the season. All teams offer whole-season ticket packages, but some teams now offer partial-season ticket packages as well. More successful teams generally sell more season tickets.
- Stadium Naming Rights: A long time ago, ballparks were named for the home team, the team owner, or a geographic location. For example: Tiger Stadium, Wrigley Field, and Three Rivers Stadium. Starting in the 1990s, teams began earning money by allowing corporations the rights to name their baseball field. Often these naming rights are made for a specific period of time. After the time expires, a new corporation can take over naming rights.



Activity

1. Explain that in this activity, students will estimate how much money different teams earned from regular ticket sales at home games during the 2011 season.
2. Provide each student with a Ticket Revenue Worksheet and a calculator. On this table, students will find a list of all the teams in Major League Baseball, the average price of a ticket for a home game, the average attendance at a home game, and the number of home games played during the 2011 season.
3. Have students fill out the first blank column of the worksheet by determining how much money each team earned from ticket sales for all home games during the 2011 season.
4. Give students time to complete the table, and then discuss the results.
 - Which team earned the most money from ticket sales?
 - Which team earned the least?
5. Discuss that even though students figured income for only home ticket sales in this exercise (and not all the other sources of revenue), it's clear that some teams earn more than other teams.
6. As a class, determine some reasons that certain teams earn more than others. Possible reasons may include: a better record, more famous players, team popularity, team history.
7. How will a team's earnings affect the player payroll? Teams that earn more are able to pay their players more. If they can afford to pay their players a lot of money, they can compete against other teams to sign the best players. Good players tend to bring more fans to the games, which then gives the teams even more money to spend.
8. Now provide students with the 2011 Average Team Salaries page. Have students fill out the second and third blank columns on the worksheet. Have students find the difference between each team's payroll and the revenue earned from home ticket sales.



9. Have students determine if there are any teams that can afford to pay their entire payroll from home ticket sales alone.
10. Discuss that most teams do not earn enough money from ticket sales alone to cover their payroll expenses or their other expenses. They depend on revenue from the other sources discussed earlier in this lesson. Review some of the teams' other income sources with the students. *Media contracts, Licensed goods, other stadium revenues.*

Conclusion:

To conclude this lesson, review that pro sports teams earn money through media contracts, licensed goods, ticket sales, and stadium revenues. Looking closely at ticket sales provides information on a team's ability to make a profit. Some teams earn a lot of money on ticket sales – some even earn enough to pay their whole teams. Other teams earn less from ticket sales, but spend heavily on players anyway. To check for understanding, have students write a letter to the MLB team owner of their choice explaining whether or not they believe that the owner is following a good business model. In their letters, students must explain their conclusions and provide suggestions for improving the team's profits.



2011 Average Team Salaries

TEAM	TOTAL PAYROLL	AVG SALARY
Kansas City Royals	\$ 36,126,000	\$ 1,338,000
Tampa Bay Rays	\$ 41,053,571	\$ 1,578,983
Pittsburgh Pirates	\$ 45,047,000	\$ 1,553,344
San Diego Padres	\$ 45,869,140	\$ 1,479,649
Cleveland Indians	\$ 49,190,566	\$ 1,639,685
Arizona Diamondbacks	\$ 53,639,833	\$ 1,986,660
Miami Marlins	\$ 56,944,000	\$ 2,190,153
Toronto Blue Jays	\$ 62,567,800	\$ 2,018,316
Washington Nationals	\$ 63,856,928	\$ 2,201,963
Oakland Athletics	\$ 66,536,500	\$ 2,376,303
Houston Astros	\$ 70,694,000	\$ 2,437,724
Cincinnati Reds	\$ 75,947,134	\$ 2,531,571
Baltimore Orioles	\$ 85,304,038	\$ 3,280,924
Milwaukee Brewers	\$ 85,497,333	\$ 2,849,911
Seattle Mariners	\$ 86,524,600	\$ 2,884,153
Atlanta Braves	\$ 87,002,692	\$ 3,346,257
Colorado Rockies	\$ 88,148,071	\$ 3,390,310
Texas Rangers	\$ 92,299,264	\$ 3,182,733
Los Angeles Dodgers	\$ 104,188,999	\$ 3,472,966
St. Louis Cardinals	\$ 105,433,572	\$ 3,904,947
Detroit Tigers	\$ 105,700,231	\$ 3,914,823
Minnesota Twins	\$ 112,737,000	\$ 4,509,480

TEAM	TOTAL PAYROLL	AVG SALARY
San Francisco Giants	\$ 118,198,333	\$ 4,377,716
New York Mets	\$ 118,847,309	\$ 4,401,752
Chicago Cubs	\$ 125,047,329	\$ 5,001,893
Chicago White Sox	\$ 127,789,000	\$ 4,732,925
Los Angeles Angels	\$ 138,543,166	\$ 4,469,134
Boston Red Sox	\$ 161,762,475	\$ 5,991,202
Philadelphia Phillies	\$ 172,976,379	\$ 5,765,879
New York Yankees	\$ 202,689,028	\$ 6,756,300



Name _____

Ticket Revenue Worksheet

Team	Average Ticket Price ¹	Average Home Game Attendance ²	Home Games 2011	Estimated Revenue from Ticket Sales	Team Payroll	Difference
Arizona Diamondbacks	\$15.74	25,992	81			
Atlanta Braves	\$19.38	30,037	79			
Baltimore Orioles	\$23.90	21,943	80			
Boston Red Sox	\$53.38	37,703	81			
Chicago White Sox	\$40.67	24,705	81			
Chicago Cubs	\$46.90	37,258	81			
Cincinnati Reds	\$20.56	27,327	81			
Cleveland Indians	\$18.49	22,726	81			
Colorado Rockies	\$19.50	35,923	81			
Detroit Tigers	\$29.32	32,617	81			
Florida Marlins	\$19.06	19,007	80			
Houston Astros	\$30.84	25,518	81			
Kansas City Royals	\$18.95	21,289	81			
Los Angeles Angels	\$17.13	39,090	81			
Los Angeles Dodgers	\$30.59	36,236	81			

¹ 2011 Fan Cost Index

² "MLB Attendance Report - 2011" <http://espn.go.com/mlb/attendance>

Team	Average Ticket Price	Average Home Game Attendance	Home Games 2011	Estimated Revenue from Ticket Sales	Team Payroll	Difference
Milwaukee Brewers	\$22.10	37,918	81			
Minnesota Twins	\$33.04	39,112	81			
New York Yankees	\$51.83	45,107	81			
New York Mets	\$31.81	30,108	79			
Oakland Athletics	\$21.52	18,232	81			
Philadelphia Phillies	\$36.29	45,440	81			
Pittsburgh Pirates	\$15.30	24,255	80			
St. Louis Cardinals	\$31.17	38,196	81			
San Diego Padres	\$15.45	26,457	81			
San Francisco Giants	\$25.04	41,818	81			
Seattle Mariners	\$26.40	23,411	81			
Tampa Bay Rays	\$19.42	18,878	81			
Texas Rangers	\$18.60	36,382	81			
Toronto Blue Jays	\$24.35	22,445	81			
Washington Nationals	\$30.54	24,877	78			



Ticket Revenue Answer Key

Team	Average Ticket Price ³	Average Home Game Attendance ⁴	Home Games 2011	Estimated Revenue from Ticket Sales	Team Payroll	Difference
Arizona Diamondbacks	\$15.74	25,992	81	\$33,138,240	\$53,639,833	-\$20,501,593
Atlanta Braves	\$19.38	30,037	79	\$45,987,247	\$87,002,692	-\$41,015,445
Baltimore Orioles	\$23.90	21,943	80	\$41,955,016	\$85,304,038	-\$43,349,022
Boston Red Sox	\$53.38	37,703	81	\$163,019,477	\$161,762,475	\$1,257,002
Chicago White Sox	\$40.67	24,705	81	\$81,384,940	\$127,789,000	-\$46,404,060
Chicago Cubs	\$46.90	37,258	81	\$141,539,416	\$125,047,329	\$16,492,087
Cincinnati Reds	\$20.56	27,327	81	\$45,509,292	\$75,947,134	-\$30,437,842
Cleveland Indians	\$18.49	22,726	81	\$34,036,502	\$49,190,566	-\$15,154,064
Colorado Rockies	\$19.50	35,923	81	\$56,740,378	\$88,148,071	-\$31,407,693
Detroit Tigers	\$29.32	32,617	81	\$77,462,765	\$105,700,231	-\$28,237,465

³ 2011 Fan Cost Index

⁴ "MLB Attendance Report - 2011" <http://espn.go.com/mlb/attendance>

Team	Average Ticket Price	Average Home Game Attendance	Home Games 2011	Estimated Revenue from Ticket Sales	Team Payroll	Difference
Florida Marlins	\$19.06	19,007	80	\$28,981,873	\$56,944,000	-\$27,962,127
Houston Astros	\$30.84	25,518	81	\$63,744,984	\$70,694,000	-\$6,949,016
Kansas City Royals	\$18.95	21,289	81	\$32,677,550	\$36,126,000	-\$3,448,450
Los Angeles Angels	\$17.13	39,090	81	\$54,238,547	\$138,543,166	-\$84,304,618
Los Angeles Dodgers	\$30.59	36,236	81	\$89,785,198	\$104,188,199	-\$14,403,001
Milwaukee Brewers	\$22.10	37,918	81	\$67,877,011	\$85,497,333	-\$17,620,322
Minnesota Twins	\$33.04	39,112	81	\$104,673,099	\$112,700,231	-\$8,027,132
New York Yankees	\$51.83	45,107	81	\$189,369,561	\$202,689,028	-\$13,319,467
New York Mets	\$31.81	30,108	79	\$75,661,102	\$118,847,309	-\$43,186,206
Oakland Athletics	\$21.52	18,232	81	\$31,780,563	\$66,536,500	-\$34,755,937
Philadelphia Phillies	\$36.29	45,440	81	\$133,570,426	\$172,976,379	-\$39,405,953
Pittsburgh Pirates	\$15.30	24,255	80	\$29,688,120	\$45,047,000	-\$15,358,880
St. Louis Cardinals	\$31.17	38,196	81	\$96,436,114	\$105,433,572	-\$8,997,457
San Diego Padres	\$15.45	26,457	81	\$33,109,612	\$45,869,140	-\$12,759,528
San Francisco Giants	\$25.04	41,818	81	\$84,816,940	\$118,198,333	-\$33,381,393

Seattle Mariners	\$26.40	23,411	81	\$50,062,082	\$86,524,600	-\$36,462,518
Tampa Bay Rays	\$19.42	18,878	81	\$29,695,471	\$41,053,571	-\$11,358,100
Texas Rangers	\$18.60	36,382	81	\$54,813,121	\$92,299,264	-\$37,486,143
Toronto Blue Jays	\$24.35	22,445	81	\$44,269,395	\$62,567,800	-\$18,298,405
Washington Nationals	\$30.54	24,877	78	\$59,259,999	\$63,856,928	-\$4,596,929

*Note that the Chicago Cubs and Boston Red Sox could afford to pay their total 2011 team payroll based on home ticket sales revenue alone.