

Area/Skill - Mathematics	Cognitive Skill Level - Application	Correlation to Framework - 05.01/05.16	Lesson Number - 37
<p><b>Activity Title - Working with Percents</b></p> <p><b>Goal/Objective</b></p> <p>To figure percentages in real-life sports situations.</p> <p><b>Lesson Outline</b></p> <p><b>Introduction</b></p> <p>Percentages are used in sports to determine the performance of the players.</p> <p><b>Activity</b></p> <p>Take students to a basketball gym. Allow each student to take 15 free throws. Divide the class into groups of three. One student will shoot the baskets, one will rebound, and one will record the data. Have the students compute the final number of shots made compared to the number of throws taken by creating a fraction. The numerator is the final number of shots made and the denominator is the total number of throws taken. Convert the fraction to a decimal and then convert the decimal to a percentage.</p> <p><b>Debriefing/Evaluation Activity</b></p> <p>Have the students share their “statistics” with the class. Compare the different teams’ results. What was the highest performance? The lowest? What process did the students use to compute their statistics?</p>		<p><b>Materials/Texts/Realia/Handouts</b></p> <ul style="list-style-type: none"> <li>• Basketballs</li> <li>• Basketball court or a basketball hoop</li> <li>• Paper and pencils</li> <li>• Chart paper/board and markers</li> </ul>	
<p><b>Real-Life Connection</b></p> <p>Provide the class with the sports page from the newspaper. Have them use specific statistics to figure such things as batting averages, free throw percentages, and the percentages of games won or loss.</p>		<p><b>Extension Activity</b></p> <p>Have students use the data from the activity to compute the mean, median, and mode. Students may also wish to document the range that existed from the lowest to the highest performance.</p> <p><b>ESE/ESOL Accommodations</b></p> <p>Allow students to use calculators to compute percentages.</p> <p>Help students to set up their initial data into fractional form.</p>	

## GED 2002 Teachers' Handbook of Lesson Plans

Area/Skill - Mathematics	Cognitive Skill Level - Application	Correlation to Framework - 05.01/05.16	Lesson Number - 37
<b>Activity Title - Working with Percents</b>			
<b>Introduction</b>			
<i>Say:</i> Today, we are going to have a free-throw shooting contest! We will use the results to create percentages, just like they do in professional sports.			
<b>Main Activity</b>			
<i>Say:</i> Divide yourselves into teams of three. One of you will shoot 15 free throws from the line. Another member of your group will rebound, and the third person will record the results. You will rotate your duties so that everyone gets a chance to shoot the basketball. When we are done, we will return to class to figure out our success rate!			
After the students have all had a chance to make their free throws, return to class.			
<i>Say:</i> Now it's time to determine your percentage of made free throws. You will compare the final number of free throws that you made to the number of throws that you took by creating a fraction. The numerator is the final number of shots you made and the denominator is the total number of throws that you took. Convert your fraction to a decimal and then convert the decimal to a percentage. This is the percentage of free throws that you made out of the total number of throws that you took, just like the statistics that you read in the sports page.			
Have students share their "statistics" with the class.			
<b>Debriefing/Evaluation Activity</b>			
Provide the class with the sports page from the newspaper. <i>Say:</i> See if you can find real-life examples of statistics in different sporting events.			
Have the students share their results with the class.			
<b>Follow-up Lessons/Activities</b>			
Using data from the newspaper, have students determine batting averages and the percentage of wins/losses of their favorite teams.			