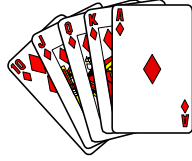


Veronica Nevarez  
5<sup>th</sup> Grade  
Percentage War

### Percentage War



#### A. Objectives:

Students will practice computing percentages.

#### B. State Competencies:

Standard 2: Number Sense

1. Fractions, Decimals, and Percents

a. Solve Problems using decimal numbers to the 1000ths place.

#### C. Lesson Resources:

The Idea for this lesson came from Wacky Word Problems by Lynette Long  
ISBN: 0-471-21061-7

#### Materials:

Pencil

Index cards

Deck of playing cards per group

Before the lesson: You need to write each of the following words on index cards. Each group should have a set of these index cards. The words are: red, black, picture cards, act, hearts, diamonds, spades, clubs, an odd number, and even number, less than 5, queens, seven or eight.

#### D. Instruction:

a. Introduction:

The students will be told that they will play to help them practice their computation skills in percents. The teacher will split the class into groups of 2 or 3 students. The teacher should review which cards are diamonds, spades, clubs, hearts, and aces. This is very critical because sometimes we take for granted that our students know these specific card playing vocabulary. I used my transparency set of playing cards and this facilitated the vocabulary review or introduction of the words in most cases.

b. Instructional Process:

- 1.) Have the students shuffle the index cards. After they have shuffled the cards, instruct the students to set the pile in the center of the playing area..
- 2.) One of the players will deal 10 playing cards. The players will then put their sets of cards face up in front of them.
- 3.) Each player will draw one card from the stack of index cards. Each player will use this card to determine what information to use to answer the following question: "What percentage of the cards in your hand is \_\_\_\_\_? Example: What percentage of the cards in your hand is red?"
- 4.) The player with the highest percentage wins both index cards.
- 5.) If the players happen to tie, then they may get to more cards and then determine the winner.
- 6.) The players will play a total of five rounds (or more if specified by the teacher).

c. Closure:

The closure to the lesson will be done with a review of how we calculate percentage with ten items.

- E. **Assessment:** Students will be assessed informally in their participation in the game. The teacher will monitor progress by walking around the room to assure comprehension of calculations of percentages.

F. **Modifications/Accommodations**

Low Level: No Accommodation on this lesson plan.

Upper Level: I would add an additional part to the game to add a challenging opportunity. This part would be to add an additional cards to make the percentages a little more challenging. I may use 20 or 25 cards instead of the 10 in the lesson.

G. **Reflection:**

Overall the students did well on this lesson. I had to model the game a little more times than expected, but once the students were confident in the rules and steps, they were on their way to independent success. Something that I did not realize until I started playing the game was that my instructions were not as clear as a wanted them to be. For example: When the students compare percentages, the loser needs to give up that percentage of cards and replace the lost cards from the middle pile. The cards that the players collect for winning become their points. If the other person lost because they had no cards of the given type, then the winner get the same amount of cards as he had of the percentage of the cards of the given type. For example: If I have 5 queens and the other player does not have any queens, then I am entitled to collect five cards from the middle that now become more of my points. The adjustment for the game also came from my

student suggests because I realized that if the loser loses his/her ten cards each round, there will not be enough cards left to play a very long game.

After I modeled the game for them, I separated them into groups. After a little monitoring my students played the rest of the period. Not once did I see any of my students off task. They loved this game. The best part about it was that the students continued using the word “percent” in their answers. I thought that was great because the concept will be retained longer if they say it and hear several more times than they would in a regular lesson from my saxon math book.