## Lesson Title: Place Value Triangle Target Toss

Grade: 4
Math enduring understandings:

1. Students understand how to make sense of the relationship among place value positions in a base-ten number system.
2. Students understand how to compare numbers.

Content Standard(s) - Grade 4
N.BT.A. 2 Read and write base-ten numerals, number names, and expanded form. Compare two-multi-digit whole numbers based on the meaning of the digits in each place, using <, >, = and symbols to record the results of comparisons.
Materials: Triangle Game board Counters:


Recording Sheet


1. Shared experience:

Object: To flip counters on the Math Game Board and try to earn a score greater than other players. Students will discover how to make sense of quantities by representing the total counters in each place as the digit and the value in each place using place value. Students understand that the ones place is the smallest unit and as each place increase by ten the values become larger. Students understand how to compare values.
Play: Students take turns flipping their color counter from fair distance from the game board. A record of the location of where the counter lands should be recorded. Every member repeats this process several times.

## Picture or model

Students will be asked to draw a representation of the game board and the record positions of the counters of each player on their team after each toss in their journals or on the recording sheet.

After all the rounds are played. The students count the total counters and label the count with a post-it or digit card they use the correct symbol to describe the total dots in each place. The connection between the understanding the meaning of the digit and the value of the place is important.

## People talk

Students discuss what they learned from their own perspective.

## Feature talk

Students will discuss the position of the counter in each game.
Students will discuss the point value of each place and compare the values and total scores of each team.
The students will compare the location of the counters, the digit the counter represents and the point value of the place each in relationship to each two different game boards.
Students will discuss different ways to read and write numbers.


## Symbolic representation

Students will be given theses standard numbers and asked the question:
What do you notice about the digit 6 and can this help you when comparing numbers?
$6,321 \quad 6,208 \quad 6,382$
Students will be asked to explain their thinking using pictures or symbols that will help people make sense of the digit 6 in the numbers above and determine, if this digit helps them compare the numbers.

## Extensions/Reteaching/What To Do Next:

After playing this game several times, students are able to transition to lessons such as
GoMath. (2015). Teacher Edition Chapter 1 Lesson 1.3 Grades 4. Houghton Mifflin Publishing Company: Orlando Florida

Teacher reflection:
For this lesson it is recommended to only have 0-9 dots in each place.
A recording sheet to compare numbers may be helpful.
Lesson Written by: Carol Houseworth and Jennifer Plaisted Mansfield City School District

