## Value That Number!

Summary
Students will complete a variety of activities to gain an understanding of the place values for ones, tens, and hundreds.

## Main Core Tie

Mathematics Grade 2
Strand: NUMBER AND OPERATIONS IN BASE TEN (2.NBT) Standard 2.NBT. 1

## Additional Core Ties

Mathematics Grade 2
Strand: NUMBER AND OPERATIONS IN BASE TEN (2.NBT) Standard 2.NBT. 3
Materials

- Place Value Holder (pdf)
- Place Value Digit Cards (pdf)
- Stack-A-Value Cards (pdf)
- Who Has the Value? (pdf) card set
Four In A Row
Two laminated Four in a Row Game Boards (pdf) (OR disposable boards with pencils)
Two 8-sided dice
Fine point dry-erase marker with cloth (if using laminated game boards)
Three Card Draw
Digit number cards 0-9
Shoot for the Stars
For each player:
- Shoot for the Stars Game Board (pdf)
- Shoot for the Stars Digit Cards (pdf)

Eight small game pieces (e.g., colored marking chips, coins, pieces of paper, etc.)
Additional Resources

- Place Value, Grade 2
, by Marsha Elyn Wright; ISBN 0768208211
- Lessons for Introducing Place Value
(Grade 2 -- Teaching Arithmetic Series), by Maryann Wickett and Marilyn Burns; ISBN 0941355454
- Place Value Counting
, by Donna Burk; ISBN 1886131090
- One Hundred Hungry Ants
, by Bonnie MacKain; ISBN 0395971233
- Let's Find Out About Money
, by Kathy Barabus; ISBN 0-590-73803-8
Background for Teachers
Students should recognize the numbers 0 to 999 . They will gain an understanding of the place values for ones, tens, and hundreds. This will be accomplished by using a variety of activities.

Students should be able to place sets of numbers in order from least to greatest and from greatest to least.

## Intended Learning Outcomes

1. Demonstrate a positive learning attitude.
2. Understand and use basic concepts and skills.
3. Communicate clearly in oral, artistic, written, and nonverbal form.

Instructional Procedures
Invitation to Learn
Every number has a value . . . we just need to figure out where and how to place each number. Instructional Procedures

Use the Place Value Holder with Place Value Digit Cards to help students create numerals and understand the place value of ones, tens, and hundreds.
Use the Stack-A-Value Cards to help students understand and be able to write the numerals in expanded form.
Pass out the Who Has the Value? card set and have students determine the value of each card.
Four in a Row
This activity emphasizes the value of ones and tens.

## Directions

This game can either be played in teams or pairs, with each team having their own Four in a Row Game Board.
One team rolls both dice at the same time and decides the best place to record the number rolled (e.g., you roll an 8 and a 5 --you can record either an 85 or 58).
The first team to fill in four numbers in a row horizontally becomes the winner.
Adaptation: You can insist the numbers be in order from least to greatest or just fill in squares between the specified numbers on the board.
Three Card Draw
This activity helps students recognize the value of ones, tens, and hundreds. It also helps students understand which three digit number is less or greater.

## Directions

Each player draws three cards and arranges them in order to make the greatest or smallest number possible with the three cards.
Whoever can make a number with the designated trait (greatest or smallest) earns a point. The first player to reach ten points becomes the winner. This game can be played with two to four players. (The "Ace" can be used as a number 1.)
Shoot for the Stars
This activity reinforces the value of ones, tens, and hundreds. It reinforces the concept of ordering whole numbers from least to greatest and from greatest to least.

## Directions

Each player shuffles and stacks the Shoot for the Stars Digit Cards face down in a pile next to his/her Shoot for the Stars Game Board.
Players take turns flipping a coin at the beginning of each game to decide whether they are trying to build the highest number (heads) or the lowest number (tails).
Each player, in turn, draws a card from his/her stack and chooses a rocket to place it on-remembering that the goal is to build either a high or low number which has been previously determined.
Players must place the number drawn on what they think will be the best position, even though a better (higher or lower) number may be drawn later. The number may not be moved after it is
placed.
The game is over when the three-digit number is created.
Both players determine who built the highest or lowest number on their game boards.
The "winner" places a game piece on one of the letters spelling "Blast Off."
The first player to cover all of the letters in "Blast Off" is the winner.

## Extensions

Activities can be altered for either slower or more advanced students by using only ones and tens or adding thousands in the place value.
Family Connections
Have students take one of the activities home to teach family members.
Have students make a list of their family members to determine whether the age of each family member fits in the ones, tens or hundreds place.
Have students list the names and ages of each family member in order from least to greatest and then add all of the ages together to determine the combined age.

Assessment Plan

- Observational
-While students are doing the activities, watch to assess understanding of place value. These activities could be used with an adult volunteer to assess progress of place value knowledge.


## Authors

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