

# Class Subject: Place Value: Expanded and Standard Form

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## Learning Objectives

- Students will be able to express numbers in their expanded form.
- Students will be able to express numbers in their standard and worded form.
- Students will be able to infer information from expanded, standard and worded numbers.

## Materials

colors per student, Activity sheets per pair, Computer/device per student, blank paper, pen/pencil per student, Activity directions

## Vocabulary

- Ones
- Tens
- Hundreds
- Thousands
- Ten Thousands
- Hundred Thousands
- Expanded
- Standard
- Worded









## Common Mistakes

- Students often find it hard to focus on such large numbers, resulting in lots of simple errors. Students of this age often inadvertently reverse places of a number, as they find them meaningless and don't understand the true purpose of each number.

## Prior Knowledge

- Students should have a basic understanding of what place value is.
- knowing that each number holds a specific value.
- Students should be familiar with working with numbers between 1–100,000.

Activity Overview

Blue Group	Orange Group	Purple Group	Green Group
 <b>Picking Places</b> Collaborative Problem Solving	 <b>The Place Value Park</b> Creating Visuals	 <b>The Place Value Park</b> Creating Visuals	 <b>Picking Places</b> Collaborative Problem Solving
 <b>Place Value Hockey</b> Math Games	 <b>Place Value Hockey</b> Math Games	 <b>Math Man</b> Math Games	 <b>Place Value Hockey</b> Math Games

Exit Ticket:

## Activity Overview

<b>Math Man</b>  In this activity, students play an online Pacman game to understand and identify numbers in their expanded form.  By: <u>Sheppard Software</u>  <b>Link:</b> <a href="http://bit.ly/MathMan_Placevalue">http://bit.ly/MathMan_Placevalue</a>	<b>Math Games</b>  Math Games enable students to practice math skills in an engaging and playful way. Games increase student’s motivation and helps associate positive math experiences	<b>Groups:</b> Purple  Provide link to students  <b>Materials:</b> Computer/device per student
<b>Picking Places</b>  In this activity students record numbers, and compare to see if one is greater than, less than or they are equal. Students read the 4th grade instructions and use the spinner to play. By: <u>Christine Cadalzo</u>  <b>Link:</b> <a href="http://bit.ly/Picking_places">http://bit.ly/Picking_places</a>	<b>Collaborative Problem Solving</b>  Collaborative Problem Solving can be done in small groups or in pairs where the group is given a problem to solve collectively.	<b>Groups:</b> Blue,Green  Print instructions, spinner and game sheet  <b>Materials:</b> Activity sheets per pair, pen/pencil per student
<b>Place Value and Expanded Form</b>  In this activity, students work through a worksheet to practice place value identification and writing numbers in standard, expanded and worded form. By: <u>Sixth Grades Science Files</u>  <b>Link:</b> <a href="http://bit.ly/PlaceValue_Expanded">http://bit.ly/PlaceValue_Expanded</a>	<b>Anchor Activity</b>  Anchor activities solve for “ragged” time, when students finish their class work early. These activities are always purposeful and either extend or review learned skills.	<b>Groups:</b>  Print worksheet off for each student  <b>Materials:</b> Pen/pencil per student
<b>Place Value Hockey</b>  In this activity students play an online game to practice place value. Students pick the digit that corresponds with the place value. If they answer questions correctly students get to try score a goal. By: <u>ABCya!</u>  <b>Link:</b> <a href="http://bit.ly/Place_Value_Hockey">http://bit.ly/Place_Value_Hockey</a>	<b>Math Games</b>  Math Games enable students to practice math skills in an engaging and playful way. Games increase student’s motivation and helps associate positive math experiences	<b>Groups:</b> Orange,Blue,Green  Provide link to students  <b>Materials:</b> Computer/device per student
<b>The Place Value Park</b>  Students practice the difference between place and value and other basic place value skills. They follow the directions to create a park. (Scroll down and click on ‘You can download The Place Value Park FREE Here’) By: <u>Teaching with a Mountain View</u>  <b>Link:</b> <a href="http://bit.ly/Place_Value_Park">http://bit.ly/Place_Value_Park</a>	<b>Creating Visuals</b>  Enables students to show their understanding in a visual manner. Students are asked to express what they know through artistic expression.	<b>Groups:</b> Orange,Purple  Print Place Value Park directions for each student  <b>Materials:</b> Activity directions, blank paper, colors per student

## Activity List

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### Blue Group

#### 1. Picking Places

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In partners, read the instructions, spin the spinner and start comparing numbers.

#### 2. Place Value Hockey

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Press GO, Select either Level 1 or 2, Select 'Place Values', Pick a player and you're ready to start. Answer 5 questions correctly to get a shot at shooting a hockey goal. Link to activity: [http://bit.ly/Place\\_Value\\_Hockey](http://bit.ly/Place_Value_Hockey)

#### Place Value and Expanded Form

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Fill in the worksheet by identifying place value and writing numbers in standard, expanded and worded form.

Exit Ticket Link:

## Orange Group

### 1. The Place Value Park

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Follow the directions on the Place Value Park sheet to draw your park.

### 2. Place Value Hockey

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Press GO, Select either Level 1 or 2, Select 'Place Values', Pick a player and you're ready to start. Answer 5 questions correctly to get a shot at shooting a hockey goal. Link to activity: [http://bit.ly/Place\\_Value\\_Hockey](http://bit.ly/Place_Value_Hockey)

### Place Value and Expanded Form

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Fill in the worksheet by identifying place value and writing numbers in standard, expanded and worded form.

Exit Ticket Link:

### Purple Group

#### 1. The Place Value Park

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Follow the directions on the Place Value Park sheet to draw your park.

#### 2. Math Man

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Click Start and go! Use the Pacman to eat all the ghosts. Make sure you only eat the number that is equal to the expanded number written at the bottom of the game screen. Link to activity: [http://bit.ly/MathMan\\_Placevalue](http://bit.ly/MathMan_Placevalue)

### Place Value and Expanded Form

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Fill in the worksheet by identifying place value and writing numbers in standard, expanded and worded form.

Exit Ticket Link:

## Green Group

### 1. Picking Places

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In partners, read the instructions, spin the spinner and start comparing numbers.

### 2. Place Value Hockey

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Press GO, Select either Level 1 or 2, Select 'Place Values', Pick a player and you're ready to start. Answer 5 questions correctly to get a shot at shooting a hockey goal. Link to activity: [http://bit.ly/Place\\_Value\\_Hockey](http://bit.ly/Place_Value_Hockey)

### Place Value and Expanded Form

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Fill in the worksheet by identifying place value and writing numbers in standard, expanded and worded form.

Exit Ticket Link: