

## Understanding Place Value

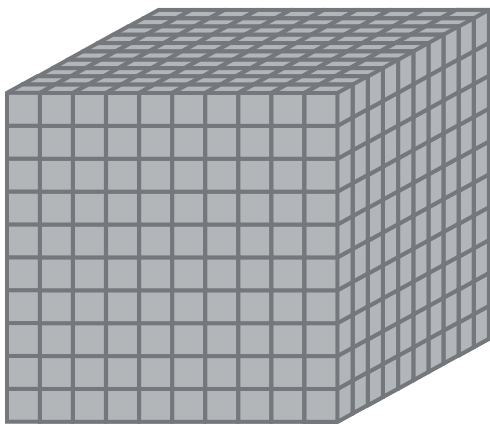
(4.NBT.A.1)

**Place value** is the value of a digit, based on its position in a number. Each place in a number has a value 10 times greater than the place to its right.

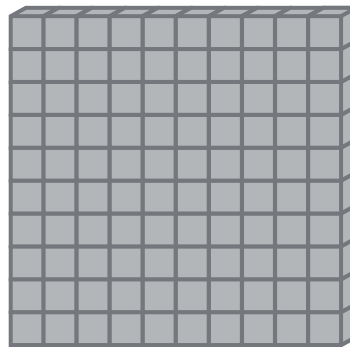
- When you multiply a number by 10, the value of each digit increases by a factor of 10, so each digit moves one place to the left.
- When you divide a number by 10, the value of each digit decreases by a factor of 10, so each digit moves one place to the right.

Place value can be represented using a place-value chart or base-ten blocks.

Thousands	Hundreds	Tens	Ones



Block (1,000)



Flat (100)



Rod (10)



Unit (1)

If your students...

**Have difficulty representing numbers with place-value charts or base-ten blocks:**

WATCH: Use a Place Value Chart and Arrow Cards to Understand Large Numbers

[https://learnzillion.com/lesson\\_plans/8993-use-a-place-value-chart-and-arrow-cards-to-understand-large-numbers#fndtn-lesson](https://learnzillion.com/lesson_plans/8993-use-a-place-value-chart-and-arrow-cards-to-understand-large-numbers#fndtn-lesson)



**Do not understand the relationship between position and value:**

WATCH: Understand Relationships Between Digits and Their Place Value

[https://learnzillion.com/lesson\\_plans/7426-understand-relationships-between-digits-and-their-place-value#fndtn-lesson](https://learnzillion.com/lesson_plans/7426-understand-relationships-between-digits-and-their-place-value#fndtn-lesson)

**For extra practice with place value:**

COMPLETE: Understanding Place Value 1

[https://www.khanacademy.org/math/pre-algebra/order-of-operations/place\\_value/e/understanding-place-value-1](https://www.khanacademy.org/math/pre-algebra/order-of-operations/place_value/e/understanding-place-value-1)

PLAY: Converting Between Place Values

[http://mrnussbaum.com/grade\\_4\\_standards/converting/](http://mrnussbaum.com/grade_4_standards/converting/)

PLAY: Identifying Place Values from Between Columns

[http://mrnussbaum.com/grade\\_4\\_standards/columns/](http://mrnussbaum.com/grade_4_standards/columns/)

PLAY: Convert Between Place Values

<https://www.ixl.com/math/grade-4/convert-between-place-values>

