

5th Grade Math: Decimal Place Value

Dear Parents/Families,

In your student's math class, the upcoming course of study deals with Decimal Place Value. Your child will examine the value of decimals (tenths, hundredths, thousandths) and learn to compare two numbers with decimals.

In fourth grade, students worked with decimal notation to write a fraction with 10 or 100 as the denominator as a fraction. They also compared decimals to the hundredths by reasoning about their size.

By the end of this course of study, the following statements describe what your student will be able to do:

- I can understand and explain the value of digits. 5.NBT.1
- I can explain patterns when multiplying a number by powers of 10. 5.NBT.2
- I can explain patterns when a decimal is multiplied or divided by a power of 10. 5.NBT.2
- I can read, write, and compare decimals to thousandths. 5.NBT.3
- I can use place value understanding to round decimals to any place. 5.NBT.4

Next year in sixth grade, students will fluently add, subtract, multiply and divide multi-digit decimals using the standard algorithm.

Vocabulary terms important to this course of study:

Tenths, hundredths, thousandths, exponents, powers of 10, decimal point, expanded notation

Additionally, the back of this paper has the IXL standards that can be practiced at home that correlate with this cluster.

If you have any questions about this new topic of study, please don't hesitate to contact a grade level teacher or our math coach. Thank you!

Sincerely,

Miss Owen, Mrs. Reilley and Mrs. Rogers

5th Grade Math: Decimal Place Value

5.NBT.1

- [Place values \(Fifth grade - A.1\)](#)
- [Convert between place values \(Fifth grade - A.2\)](#)
- [Place values in decimal numbers \(Fifth grade - G.4\)](#)

5.NBT.2

- [Scientific notation \(Fifth grade - A.11\)](#)
- [Multiplication patterns over increasing place values \(Fifth grade - C.3\)](#)
- [Multiply numbers ending in zeroes \(Fifth grade - C.4\)](#)
- [Multiply numbers ending in zeroes: word problems \(Fifth grade - C.5\)](#)
- [Division patterns over increasing place values \(Fifth grade - D.7\)](#)
- [Multiply a decimal by a power of ten \(Fifth grade - I.2\)](#)
- [Divide by powers of ten \(Fifth grade - J.1\)](#)
- [Decimal division patterns over increasing place values \(Fifth grade - J.2\)](#)

5.NBT.3

- [What decimal number is illustrated? \(Fifth grade - G.1\)](#)
- [Model decimals and fractions \(Fifth grade - G.2\)](#)
- [Understanding decimals expressed in words \(Fifth grade - G.3\)](#)
- [Place values in decimal numbers \(Fifth grade - G.4\)](#)
- [Convert decimals between standard and expanded form \(Fifth grade - G.5\)](#)
- [Convert decimals between standard and expanded form using fractions \(Fifth grade - G.14\)](#)
- [Equivalent decimals \(Fifth grade - G.6\)](#)
- [Decimal number lines \(Fifth grade - G.8\)](#)
- [Compare decimals on number lines \(Fifth grade - G.9\)](#)
- [Compare decimal numbers \(Fifth grade - G.10\)](#)
- [Put decimal numbers in order \(Fifth grade - G.11\)](#)
- [Compare decimals and fractions on number lines \(Fifth grade - G.15\)](#)
- [Inequalities with decimal multiplication \(Fifth grade - I.10\)](#)

5.NBT.4

- [Round decimals \(Fifth grade - G.7\)](#)
- [Estimate sums and differences of decimals \(Fifth grade - H.8\)](#)

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