

OVERVIEW

The focus this week will be representing decimals using number lines, money, and decimals grids, and write decimals using standard form, as fractions, word form, and in expanded notation. Compare decimals.

Target: C Standard <u>5.NBT.3:</u>	Read, write, and compare decimals to thousandths. b: Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
Skills	<ul style="list-style-type: none"> • Compare decimals to the thousandths • Use base-ten numerals • Write, read numbers in number names and expanded form • Work with models (base ten blocks, money, place value chart) • Emphasize language with the use of sentence starters
Learning Intention	Students will <input type="checkbox"/> represent decimals to the hundredths with money and compare them
Success Criteria	I can compare decimals.
Item Specification	Multiple Choice (Item Specifications DOK1) Numeric Entry (Item Specifications DOK1) Matching Tables (Item Specifications DOK2) Multiple Choice (Item Specifications DOK2) (b) Matching Tables (Item Specifications DOK2)
Vocabulary	decimals, fractions, tenths, hundredths, thousandths, between, greater than, less than
Sentence Frames	<ul style="list-style-type: none"> • I know _____ is greater than/less than _____ because _____. • I know _____ is equal to _____ because _____.
Intro	Math Talks-use slides with rules/routines.
Lesson	Model/Think-Aloud (Adapted from SFUSD) <ul style="list-style-type: none"> • Tell students that in today's lesson they will only focus on decimals to hundredths to compare them. Go over the slides Things we know about decimals • Choose a norm or Math Behavior you want to focus on and discuss. • Tell students they have a copy of the place value chart to use when they begin to compare decimals. Have students complete the Comparing Decimals Sheet.
Closing	Check for Understanding: <ul style="list-style-type: none"> • How does the position of a digit in a number relate to its value?
Resources	Math Talks slide (Teacher Slides) Math Behavior (Teacher Resource) Place value chart (make a copy for each student) Things we know about decimals (Teacher Slides) Comparing Decimals Sheet (make a copy for each student)

Target: C Standard <u>5.NBT.3:</u>	Read, write, and compare decimals to thousandths. a: Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.
Skills	<ul style="list-style-type: none"> • Compare decimals to the thousandths • Use base-ten numerals • Write, read numbers in number names and expanded form • Work with models (base ten blocks, money, place value chart) • Emphasize language with the use of sentence starters
Learning Intention	Students will <input type="checkbox"/> extend their understanding of decimals to the thousandths and explore decimal equivalence.
Success Criteria	I can after given a decimal in standard, I create decimal squares in as many different ways as I can.
Item Specification	Multiple Choice (Item Specifications DOK1) Numeric Entry (Item Specifications DOK1) Matching Tables (Item Specifications DOK2) Multiple Choice (Item Specifications DOK2) (b) Matching Tables (Item Specifications DOK2)
Vocabulary	decimals, fractions, number lines, expanded notation, standard notation, decimal grids, tenths, hundredths, thousandths
Sentence Frames	<ul style="list-style-type: none"> • ____ hundredths equals ____ tenths. • ____ ones equals ____ tenths. • ____ hundredths equals ____ ones, etc.
Intro	Math Talks-use slides with rules/routines.
Lesson	Model/Think-Aloud (Adapted from SFUSD) <ul style="list-style-type: none"> • Choose a norm or Math Behavior you want to focus on and discuss. • Tell students that today they will extend their work with the decimal number system using decimal squares, which are another visual model to help write and compare decimals. • Go over the Decimal Grids Slides with your students. Have them follow along using the student page decimal grids. • Ask students to make their given decimals using the whole, the tenths grid, the hundredths grid, and the thousandths grid. They should label their drawings using words, decimal notation, and expanded notation. <p>→ Core Math to Emphasize</p> <ul style="list-style-type: none"> • The value of a digit in any place is 10 times the value of the digit to its right and 1/10 of the value of the digit to the left.
Closing	Check for Understanding: <ul style="list-style-type: none"> • What patterns do you notice between the different decimal representations?
Resources	Math Talks slide (Teacher Slides) Math Behavior (Teacher Resource) Decimal Grids Slides (Teacher Slides)

Target: C Standard 5.NBT.3:	<p>Read, write, and compare decimals to thousandths.</p> <p>a: Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.</p> <p>b: Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p>
Skills	<ul style="list-style-type: none"> • Compare decimals to the thousandths • Use base-ten numerals • Write, read numbers in number names and expanded form • Work with models (base ten blocks, money, place value chart) • Emphasize language with the use of sentence starters
Learning Intention	<p>Students will</p> <ul style="list-style-type: none"> ❑ solve decimal comparison problems within context.
Success Criteria	I can partition hundredths into thousandths to predict a reasonable weight of a fish that is between 2.56 and 2.57 pounds.
Item Specification	<p>Multiple Choice (Item Specifications DOK1)</p> <p>Numeric Entry (Item Specifications DOK1)</p> <p>Matching Tables (Item Specifications DOK2)</p> <p>Multiple Choice (Item Specifications DOK2)</p> <p>(b) Matching Tables (Item Specifications DOK2)</p>
Vocabulary	fish, scale, decimal point, digit, number, between, less than, nearest
Sentence Frames	<ul style="list-style-type: none"> • I know that _____ is between _____ and because _____. (Or if greater scaffold is needed: I know that (number) is between (number) and (number) because _____.) • I chose these numbers because _____.
Intro	Math Talks-use slides with rules/routines.
Lesson	<p>Model/Think-Aloud (Adapted from SFUSD)</p> <ul style="list-style-type: none"> • Tell students that today they will focus on the Math Behavior : Model with Mathematics. Use multiple strategies and multiple representations. Tell them that you will be asking them to explain their strategies, and they should be prepared to present their thinking to the class. • Show the Grocery Weights Task (Slides) do the first problem together, then have students finish the next two questions on their own. (see Task Grocery Weights Student Page) After, students are done, go over the strategies they used to solve the problem and discuss it as a whole class. (see Grocery Task Answer Guide) for support. <p>→ Core Math to Emphasize</p> <ul style="list-style-type: none"> • Decimals can be compared by analyzing corresponding place values.
Closing	<p>Check for Understanding:</p> <ul style="list-style-type: none"> • Choose a different strategy used to solve the problem. How is it similar and/or different than the strategy you used?
Resources	Math Talks slide (Teacher Slides)

	Math Behavior (Teacher Resource) Grocery Weights Task (Teacher Slides) Task Grocery Weights Student Page (make a copy for each student) Grocery Task Answer Guide (Teacher Resource)
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Skills	<ul style="list-style-type: none"> • Compare decimals to the thousandths • Use base-ten numerals • Write, read numbers in number names and expanded form • Work with models (base ten blocks, money, place value chart) • Emphasize language with the use of sentence starters
Learning Intention	Students will <input type="checkbox"/> compare and order decimals to the thousandths.
Success Criteria	I can represent decimals on a number line.
Item Specification	Multiple Choice (Item Specifications DOK1) Numeric Entry (Item Specifications DOK1) Matching Tables (Item Specifications DOK2) Multiple Choice (Item Specifications DOK2) (b) Matching Tables (Item Specifications DOK2)
Vocabulary	decimals, fractions, number lines, expanded notation, standard notation, decimal grids, tenths, hundredths, thousandths
Sentence Frames	<ul style="list-style-type: none"> • I chose these numbers because _____.
Intro	Math Talks–use slides with rules/routines.
Lesson	Model/Think-Aloud (Adapted from SFUSD) <ul style="list-style-type: none"> • Choose a norm or Math Behavior you want to focus on and discuss. • Introduce today’s investigation with the following problem: Starter problem Slides • Brainstorm student ideas for models, but do not solve at this time. Today the class will focus on number lines, and tomorrow the problem will be solved. • Tell students that they will be making decimal number lines along with you. Start with Introducing Open Number Line Slides. Students need their open number line page. • Assign an interval to students students, and have them create their number line on their number line page. • 0.1–0.2, 0.2–0.3, 0.3–0.4, 0.4–0.5, 0.5–0.6, 0.6–0.7, 0.7–0.8, 0.8–0.9, 0.9–1.0.

	<ul style="list-style-type: none"> • After making the number line, have them shade and label decimal squares to represent one of the points on the line. • You can use this web resource, Zoomable Number Line, to demonstrate how the space between numbers is divided into tenths, then hundredths, then thousandths etc.
Closing	Check for Understanding: <ul style="list-style-type: none"> • How did a number line help you make sense of the math today?
Resources	Math Talks slide (Teacher Slides) Math Behavior (Teacher Resource) Starter problem Slides (Teacher Slides) Introducing Open Number Line Slides (Teacher Slides) Open number line page. (make a copy for each student) Zoomable Number Line (Digital Resource)

