

Grade 5 Unit 5 - Place Value Patterns and Decimal Operations

Section A - Lessons 1-10

Unit Goal:

- Students build from place value understanding in grade 4 to recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $\frac{1}{10}$ of what it represents in the place to its left. They use this place value understanding to round, compare, order, add, subtract, multiply and divide decimals.
- [Grade 5 Unit 5 I Can Statements](#)
- [Grade 5 Unit 5 Centers](#)

Section A Goals:

- Compare, round and order decimals through the thousandths place based on the value of the digits in each place.
- Read, write, and represent decimals to the thousandths place, including in expanded form.

**Lessons/resources denoted with an asterisk are Desmos activities*

IM Lesson	L1: What is One Thousandth?	L2: Thousandths on Grids and in Words	L3: Thousandths in Expanded Form	L4: Explore Place Value Relationships (optional)	L5: Compare Decimals
Ar Math Content Standards	5.NBT.A, 5.NBT.A.1	5.NBT.A, 5.NBT.A.3	5.NBT.A.1, 5.NBT.A.3, 5.OA.A	5.NBT.A.1, 5.NBT.A.3	5.NBT.A.3
AR Math Practice Standards	MP7	MP 3, 6, 7	MP. 2	MP. 2, 7	MP. 5, 7
Accessibility Supports	Representation, MLR7	Engagement, MLR2		Representation, MLR1	Representation, MLR8
Vocabulary Focus					
Lesson Resources	L1 - Slide Deck L1 - Student Tasks* Chart paper Colored pencils, crayons, or markers Copies of Small Grids	L2 - Slide Deck L2 - Student Tasks*	L3 - Slide Deck L3 - Student Tasks*	L4 - Slide Deck L4 - Student Tasks* *students might need a hundreds grid.	L5 - Slide Deck L5 - Student Tasks* Small grids
Assessment	Cool Down* Pre-Unit Practice Problems	Cool Down*	Cool Down*	Cool Down*	Cool Down*

Suggested Centers/ Materials/ Resources	<ul style="list-style-type: none"> ● Mystery Number (1–4), Stage 5: Six-digit Numbers (Supporting) ● Greatest of Them All (1–5), Stage 3: Multi-digit Numbers (Supporting) 	<ul style="list-style-type: none"> ● Mystery Number (1–4), Stage 5: Six-digit Numbers (Supporting) ● Get Your Numbers in Order (Stage 4) (Supporting) 	<ul style="list-style-type: none"> ● Mystery Number (1–4), Stage 5: Six-digit Numbers (Supporting) ● Get Your Numbers in Order (Stage 4) (Supporting) 	Tic Tac Round (Stage 3) (Supporting) Get Your Numbers in Order (Stage 4) (addressing) Jump the Line (Stage 2) (supporting)	<ul style="list-style-type: none"> ● Mystery Number (1–4), Stage 5: Six-digit Numbers (Supporting) ● Get Your Numbers in Order (Stage 5) (Supporting)
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Section A - Lessons 1-10

Section A Goals:

- Compare, round and order decimals through the thousandths place based on the value of the digits in each place.
- Read, write, and represent decimals to the thousandths place, including in expanded form.

IM Lesson	L6: Compare Decimals on the Number Line	L7: Round Doubloons (PLC)	L8: Round Decimals	L9: Order Decimals
Ar Math Content Standards	5.NBT.A.3	5.NBT.A.3, 5.NBT.A.4	5.NBT.A.4	5.NBT.A.4
AR Math Practice Standards	MP. 6, 7	MP. 6	MP. 2	MP. 1, 3, 7
Accessibility Supports	Engagement, MLR8	Engagement, MLR8	Action and Expression, MLR8	Engagement, MLR1
Vocabulary Focus				
Lesson Resources	L6 - Slide Deck L6 - Student Tasks*	L7 - Slide Deck L7 - Student Tasks*	L8 - Slide Deck L8 - Student Tasks*	L9 - Slide Deck L9 - Student Tasks*
Assessment	Cool Down*	Cool Down*	Cool Down*	Cool Down*
Suggested Centers/ Materials/ Resources	Mystery Number (Stage 6) (Addressing) Get Your Numbers in Order (Stage 5) (Addressing)	Mystery Number (Stage 6) (Addressing) Get Your Numbers in Order (Stage 5) (Addressing)	Mystery Number (Stage 6) (Addressing) Get Your Numbers in Order (Stage 5) (Addressing)	Greatest of Them All (Addressing) Get Your Numbers in Order (Stage 5) (Addressing)

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Section B - Lessons 11-16

Goals:

- Add and subtract decimals to the hundredths using strategies based on place value.

**Lessons/resources denoted with an asterisk are Desmos activities*

IM Lesson	L11: Make Sense of Decimal Addition (PLC)	L12: Estimate and Add	L13: Analyze Addition Mistakes	L14: Make Sense of Decimal Subtraction	L15: Estimate a
Ar Math Content Standards	5.NBT.B.7	5.NBT.B.7	5.NBT.B.7	5.NBT.B.7	5.NBT.B.7
AR Math Practice Standards	MP. 5	MP. 3	MP. 3, 6	MP. 5	MP. 3
Accessibility Supports	Engagement	Representation	Engagement	Representation	Action and Exp
Vocabulary Focus					
Lesson Resources	L11 - Slide Deck L11 - Student Tasks* Chart paper(each group of 2 needs a piece of chart paper) Colored pencils Number cubes(each group of 2 needs 1 cube) Target Numbers Stage 8 Recording Sheet	L12 - Slide Deck L12 - Student Tasks*	L13 - Slide Deck L13 - Student Tasks*	L14 - Slide Deck L14 - Student Tasks* Chart paper Colored pencils Number cubes Target Numbers Stage 9 Recording Sheet Small Grids	L15 - Slide De L15 - Student
Assessment	Cool Down*	Cool Down*	Cool Down*	Cool Down*	Cool Down*
Suggested Centers/ Materials/ Resources	Tic Tac Round (Stage 3) Addressing Greatest of Them All (Stage 4) (Addressing) Jump the Line (Stage 2) Supporting	Tic Tac Round (Stage 3) Addressing Greatest of Them All (Stage 4) (Addressing) Jump the Line (Stage 2) Supporting	Jump the Line (Stage 2) Supporting How Close? (Stage 7) (Supporting)	Jump the Line (Stage 2) Support How Close? (Stage 7) (Supporting)	Jump the Line (St How Close? (Stac (Supporting)

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Section C - Lessons 17-21

Goals:

- Multiply decimals with products resulting in the hundredths using place value reasoning and properties of operations.

**Lessons/resources denoted with an asterisk are Desmos activities*

IM Lesson	L17: Multiply Decimals and Whole Numbers	L18: Use Whole Number Facts	L19: Use Properties to Multiply Decimals	L20: Products in the Hundredths Place (PLC)
Ar Math Content Standards	5.NBT.B.7, 5.OA.A.2	5.NBT.B.7, 5.OA.A.1	5.NBT.B.7, 5.OA.A	5.NBT.B.7, 5.NF.B.4
AR Math Practice Standards	MP. 7	MP. 2, 3, 7	MP. 7	MP. 7
Accessibility Supports	Action and Expression	Action and Expression	Engagement	Representation, MLR8
Vocabulary Focus				
Lesson Resources	L17 - Slide Deck L17 - Student Tasks* Small grids	L18 - Slide Deck L18 - Student Tasks*	L19 - Slide Deck L19 - Student Tasks* Decimal Multiplication Expression Card Sort	L20 - Slide Deck L20 - Student Tasks* Small grids
Assessment	Cool Down*	Cool Down*	Cool Down*	Cool Down*
Suggested Centers/ Materials/ Resources	Target Numbers (Stage 8-9) (Addressing)	Target Numbers (Stage 8-9) (Addressing)	Target Numbers (Stage 8-9) (Addressing)	Target Numbers (Stage 8-9) (Addressing)

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Section D - Lessons 22-26

Goals:

- Divide decimals with quotients resulting in the hundredths using place value reasoning and properties of operations.

**Lessons/resources denoted with an asterisk are Desmos activities*

IM Lesson	L22: Divide Whole Numbers by 0.1 and 0.01	L23: Divide Whole Numbers by Decimals	L24: Divide Decimals by Whole Numbers	L25: Divide Decimals by Decimals
Ar Math Content Standards	5.NBT.B.7	5.NBT.B.7	5.NBT.B.7	5.NBT.B.7
AR Math Practice Standards	MP. 7	MP. 8	MP. 7	MP. 6
Accessibility Supports	Representation	Action and Expression	Representation, MLR8	Representation, MLR7
Vocabulary Focus				
Lesson Resources	L22 - Slide Deck L22 - Student Tasks* Small grids	L23 - Slide Deck L23 - Student Tasks* Small grids	L24 - Slide Deck L24 - Student Tasks* Small grids	L25 - Slide Deck L25 - Student Tasks* Small grids
Assessment	Cool Down*	Cool Down*	Cool Down*	Cool Down* Section D Practice Problem Section D Checkpoint*
Suggested Centers/ Materials/ Resources	Compare (Stage 4 and 6) (Supporting)	Compare (Stage 4 and 6) (Supporting)	Compare (Stage 4 and 6) (Supporting) Would You Rather? (Stage 2) (Supporting)	Compare (Stage 4 and 6) (Supporting) Would You Rather? (Stage 2) (Supporting)

Created by Jill Jones, and updated by Britnee Wright