

Lesson/Unit Name: Sums and Differences to 20

Content Area: Mathematics

Grade Level: 2

Overall Rating:

E

Exemplar

Reviewer 1

Dimension I – Alignment to the Depth of the CCSS

<p><i>The lesson/unit aligns with the letter and spirit of the CCSS:</i></p> <ul style="list-style-type: none"> ✓ Targets a set of grade-level CCSS mathematics standard(s) to the full depth of the standards for teaching and learning. ✓ Standards for Mathematical Practice that are central to the lesson are identified, handled in a grade-appropriate way, and well connected to the content being addressed. ✓ Presents a balance of mathematical procedures and deeper conceptual understanding inherent in the CCSS. 	<p>The group of standards addressed in this unit is appropriately combined and which are targeted or supporting standards are clearly stated. The lessons are aligned to these standards and lead to an appropriate depth of understanding of the concepts and procedures.</p> <p>Four central Mathematical Practices are identified in the lesson overview along with explicit connections to how they are connected to the lesson. MP.7 is called out very well in lesson 6 and referenced again in lesson 8. Consider adding in more explicit references to the other Math Practices to ensure teachers are aware of when to emphasize certain teaching points.</p>
<p>Rating: 3 – Meets most to all of the criteria in the dimension</p>	

Dimension II – Key Shifts the CCSS

<p><i>The lesson/unit reflects evidence of key shifts that are reflected in the CCSS:</i></p> <ul style="list-style-type: none"> ✓ Focus: Lessons and units targeting the major work of the grade provide an especially in-depth treatment, with especially high expectations. Lessons and units targeting supporting work of the grade have visible connection to the major work of the grade and are sufficiently brief. Lessons and units do not hold students responsible for material from later grades. ✓ Coherence: The content develops through reasoning about the new concepts on the basis of previous understandings. Where appropriate, provides opportunities for students to connect knowledge and skills within or across clusters, domains and learning progressions. ✓ Rigor: Requires students to engage with and demonstrate challenging mathematics with appropriate balance among the following: <ul style="list-style-type: none"> – Application: Provides opportunities for students to independently apply mathematical concepts in real-world situations and solve challenging problems with persistence, choosing and applying an appropriate model or strategy to new situations. 	<p>This unit aligns with key Common Core emphases for 2nd grade math. There are explicit connections to first grade standards and also a chart that demonstrates how the unit develops over the 10 instructional days. Consider adding in the connection to third grade standards to be clear where they are building to.</p> <p>Each lesson has interconnected components of fluency (several different activities), conceptual understanding (scaffolding student understanding), and application (independent practice with a variety of numbers). You might add more application through real world problem solving, similar to the cans problem in lesson 7. The "Distribution of Instructional Minutes" graph emphasized the importance of spending time on each part.</p>
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<ul style="list-style-type: none"> - Conceptual Understanding: Develops students' conceptual understanding through tasks, brief problems, questions, multiple representations and opportunities for students to write and speak about their understanding. - Procedural Skill and Fluency: Expects, supports and provides guidelines for procedural skill and fluency with core calculations and mathematical procedures (when called for in the standards for the grade) to be performed quickly and accurately. 	
<p>Rating: 3 – Meets most to all of the criteria in the dimension</p>	

Dimension III – Instructional Supports

<p><i>The lesson/unit is responsive to varied student learning needs:</i></p> <ul style="list-style-type: none"> ✓ Includes clear and sufficient guidance to support teaching and learning of the targeted standards, including, when appropriate, the use of technology and media. ✓ Uses and encourages precise and accurate mathematics, academic language, terminology and concrete or abstract representations (e.g., pictures, symbols, expressions, equations, graphics, models) in the discipline. ✓ Engages students in productive struggle through relevant, thought-provoking questions, problems and tasks that stimulate interest and elicit mathematical thinking. ✓ Addresses instructional expectations and is easy to understand and use. <input type="checkbox"/> Provides appropriate level and type of scaffolding, differentiation, intervention and support for a broad range of learners. <ul style="list-style-type: none"> - Supports diverse cultural and linguistic backgrounds, interests and styles. - Provides extra supports for students working below grade level. - Provides extensions for students with high interest or working above grade level. <p><i>A unit or longer lesson should:</i></p> <ul style="list-style-type: none"> <input type="checkbox"/> Recommend and facilitate a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share). ✓ Gradually remove supports, requiring students to demonstrate their mathematical understanding independently. ✓ Demonstrate an effective sequence and a 	<p>Clear, detailed directions for instruction and student activities (including multiple representations and appropriate vocabulary) are provided for all parts of the lessons. The bank of questions for teachers to choose from during the debrief supports teachers in leading students toward conceptual understanding through thought-provoking questions while still providing room to meet unique class' needs.</p> <p>Comprehensive mathematical rationale is provided such that this could possibly build or clarify content knowledge for a novice teacher or serve as a reminder for the important connections within these concepts for more experienced teachers.</p> <p>There are also "Notes on Multiple Means of Representation" that name some ways to differentiate for diverse learners, including strategically choosing the numbers given to different students. Consider adding more explicit guidance for how to scaffold activities, particularly the fluency and application sections, for ELLs and students who do not have the foundational knowledge expected from grade 1 Common Core Standards.</p>
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<p>progression of learning where the concepts or skills advance and deepen over time.</p> <ul style="list-style-type: none"> ✓ Expect, support and provide guidelines for procedural skill and fluency with core calculations and mathematical procedures (when called for in the standards for the grade) to be performed quickly and accurately. 	
<p>Rating: 3 – Meets most to all of the criteria in the dimension</p>	

Dimension IV – Assessment

<p><i>The lesson/unit regularly assesses whether students are mastering standards-based content and skills:</i></p> <ul style="list-style-type: none"> ✓ Is designed to elicit direct, observable evidence of the degree to which a student can independently demonstrate the targeted CCSS. ✓ Assesses student proficiency using methods that are accessible and unbiased, including the use of grade-level language in student prompts. ✓ Includes aligned rubrics, answer keys and scoring guidelines that provide sufficient guidance for interpreting student performance. <p><i>A unit or longer lesson should:</i></p> <ul style="list-style-type: none"> ✓ Use varied modes of curriculum-embedded assessments that may include pre-, formative, summative and self-assessment measures. 	<p>The assessments that are present are accessible and there is a note that teachers may read word problems aloud to students. There might be more clarity around whether students are able to solve the problems with any strategy or if they need to use the targeted strategies only. In addition, students might be given the opportunity to demonstrate mastery through verbal explanation and use of manipulatives.</p> <p>Answer keys are included for formative assessments and a rubric is provided for the end of unit summative assessment. The rubric could be fleshed out further to describe exactly what mastery looks like.</p> <p>Consider more explicitly calling out ways that teachers can assess students individually during the lesson (rather than just choral response) in order to identify and meet student needs. Specifically name the misconceptions teachers should be looking for and how to address them.</p>
<p>Rating: 2 – Meets many of the criteria in the dimension</p>	

Summary Comments

<p>This unit is an exemplar. It is aligned to the targeted standards for second grade and balances deep conceptual understanding with procedural fluency in an integrated way. This unit would benefit from more guidance for teachers around how to assess students throughout the lessons, such as common misconceptions to look for and how to respond.</p>
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Reviewer 2

Dimension I – Alignment to the Depth of the CCSS

<p><i>The lesson/unit aligns with the letter and spirit of the CCSS:</i></p> <ul style="list-style-type: none"> ✓ Targets a set of grade-level CCSS mathematics standard(s) to the full depth of the standards for teaching and learning. ✓ Standards for Mathematical Practice that are central to the lesson are identified, handled in a grade-appropriate way, and well connected to the content being addressed. ✓ Presents a balance of mathematical procedures and deeper conceptual understanding inherent 	<p>This is a strong unit in that it not only targets a specific set of standards for the grade, it appropriately ties in learning from previous grades and makes the necessary connections for students. The lessons and activities contained within the unit are specific to the standard, but they also make connections to additional supporting standards. The Standards for Mathematical Practice are clearly evident throughout both the overview and the individual lessons. It is explicitly indicated which Practices are being utilized and where during the lessons/activities these Practices should be exhibited by students. The focus on Practices is narrow enough that teachers can focus on utilizing them with fidelity, but also varied enough that students receive exposure to multiple Practices. Additionally, the Practices are very appropriate for the</p>
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in the CCSS.	unit, the individual lessons in which they are evident, as well as for the targeted grade. The lessons and activities that are contained within the unit provide opportunities for students to both practice mathematical procedures and deepen the emphasized concepts in multiple ways throughout the course of the whole unit.
Rating: 3 – Meets most to all of the criteria in the dimension	

Dimension II – Key Shifts the CCSS

<p><i>The lesson/unit reflects evidence of key shifts that are reflected in the CCSS:</i></p> <ul style="list-style-type: none"> ✓ Focus: Lessons and units targeting the major work of the grade provide an especially in-depth treatment, with especially high expectations. Lessons and units targeting supporting work of the grade have visible connection to the major work of the grade and are sufficiently brief. Lessons and units do not hold students responsible for material from later grades. ✓ Coherence: The content develops through reasoning about the new concepts on the basis of previous understandings. Where appropriate, provides opportunities for students to connect knowledge and skills within or across clusters, domains and learning progressions. ✓ Rigor: Requires students to engage with and demonstrate challenging mathematics with appropriate balance among the following: <ul style="list-style-type: none"> – Application: Provides opportunities for students to independently apply mathematical concepts in real-world situations and solve challenging problems with persistence, choosing and applying an appropriate model or strategy to new situations. – Conceptual Understanding: Develops students’ conceptual understanding through tasks, brief problems, questions, multiple representations and opportunities for students to write and speak about their understanding. – Procedural Skill and Fluency: Expects, supports and provides guidelines for procedural skill and fluency with core calculations and mathematical procedures (when called for in the standards for the grade) to be performed quickly and accurately. 	<p>This unit most certainly focuses on the major work of the grade by extending the students' understanding of base-ten notation and using that in order to build fluency with addition and subtraction. Each lesson within the unit is based on making connections to previous work both from previous grades as well as from previous standards taught within the current grade. The opportunity to work across domains and clusters is central to the lesson, as it ties in addition and subtraction to 20 (2.OA.1-2) and working with base tens (2.NBT.5). The chart that shows the Overview of Module Topics and Lesson Objectives really gives the teacher a blueprint of that vertical alignment that is necessary for showing students the progression of learning and was a definite indicator that the developer considered coherence. This chart also helps to show the coherence between the other lessons in the unit that were not reviewed, but certainly indicate a connection and clear progress of learning for the unit as a whole. A suggestion would be to take this coherence a step further by reflecting on the next grade or upcoming standards and giving credence to where students will take these concepts in the future.</p>
Rating: 3 – Meets most to all of the criteria in the dimension	

Dimension III – Instructional Supports

<p><i>The lesson/unit is responsive to varied student learning needs:</i></p> <ul style="list-style-type: none"> ✓ Includes clear and sufficient guidance to support teaching and learning of the targeted standards, including, when appropriate, the use of technology and media. ✓ Uses and encourages precise and accurate mathematics, academic language, terminology and concrete or abstract representations (e.g., pictures, symbols, expressions, equations, graphics, models) in the discipline. ✓ Engages students in productive struggle through relevant, thought-provoking questions, problems and tasks that stimulate interest and elicit mathematical thinking. ✓ Addresses instructional expectations and is easy to understand and use. ✓ Provides appropriate level and type of scaffolding, differentiation, intervention and support for a broad range of learners. <ul style="list-style-type: none"> – Supports diverse cultural and linguistic backgrounds, interests and styles. – Provides extra supports for students working below grade level. – Provides extensions for students with high interest or working above grade level. <p><i>A unit or longer lesson should:</i></p> <ul style="list-style-type: none"> ✓ Recommend and facilitate a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share). ✓ Gradually remove supports, requiring students to demonstrate their mathematical understanding independently. ✓ Demonstrate an effective sequence and a progression of learning where the concepts or skills advance and deepen over time. ✓ Expect, support and provide guidelines for procedural skill and fluency with core calculations and mathematical procedures (when called for in the standards for the grade) to be performed quickly and accurately. 	<p>The unit and the lessons within are clear and articulate in expectations of both teachers and students. It is specific and easy to follow in its flow and application. Academic language is not only encouraged, but is required for students to follow along and participate in the discussions; it is embedded in all of the work that students are responsible for. Accurate and precise mathematics is expected and is developed through the fluency practices within the individual lessons. Supports and scaffolding are present, but could be more explicit. It is indicated in the Overview that the needs of diverse learners are met through outside resources (which are named), but including them explicitly in the lessons would be more beneficial and efficient for teachers. A variety of learning styles were accommodated, but this is another area where the lesson could be strengthened by reviewing the Universal Design for Learning principles.</p>
<p>Rating: 3 – Meets most to all of the criteria in the dimension</p>	

Dimension IV – Assessment

<p><i>The lesson/unit regularly assesses whether students are mastering standards-based content and skills:</i></p> <ul style="list-style-type: none"> ✓ Is designed to elicit direct, observable evidence of the degree to which a student can independently demonstrate the targeted CCSS. 	<p>The unit contains opportunities for students to demonstrate learning throughout through discussions, observation, work, and assessments. The work offered uses grade-level appropriate language that is relevant to the concepts, and an appropriate amount of work is presented. Answer keys to some of the student work is embedded in the lesson; however, the pictures containing the answers are small and can be difficult to read. The full set of</p>
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<ul style="list-style-type: none"> ✓ Assesses student proficiency using methods that are accessible and unbiased, including the use of grade-level language in student prompts. ✓ Includes aligned rubrics, answer keys and scoring guidelines that provide sufficient guidance for interpreting student performance. <p><i>A unit or longer lesson should:</i></p> <ul style="list-style-type: none"> ✓ Use varied modes of curriculum-embedded assessments that may include pre-, formative, summative and self-assessment measures. 	<p>answer keys should be included with the attachments for student work. Additionally, the rubric that is included for the summative assessment can be difficult for some teachers to follow. A clearer rubric would be beneficial. Varied models of curriculum-embedded assessments within the submission include formative and summative assessments, but little pre- or self-assessment measures. The fluency Sprints can serve as pre- and self-assessments, but these types of assessments need to be developed further in order to strengthen the overall assessment criteria. It has been taken into account that these lessons exist within the larger unit and that a pre-assessment may be present in an un-reviewed, earlier lesson.</p>
<p>Rating: 3 – Meets most to all of the criteria in the dimension</p>	

Summary Comments

The lessons contained within the unit presented are strong lessons that are certainly considered exemplar. Attention to criteria was clearly indicated in the development of the lessons. They were clear, well-thought-out, and well-presented. Each domain was scored at a 3, although suggestions include opportunities for more support for diverse learners and better answer keys and rubrics for scoring.

Reviewer 3

Dimension I – Alignment to the Depth of the CCSS

<p><i>The lesson/unit aligns with the letter and spirit of the CCSS:</i></p> <ul style="list-style-type: none"> ✓ Targets a set of grade-level CCSS mathematics standard(s) to the full depth of the standards for teaching and learning. ✓ Standards for Mathematical Practice that are central to the lesson are identified, handled in a grade-appropriate way, and well connected to the content being addressed. ✓ Presents a balance of mathematical procedures and deeper conceptual understanding inherent in the CCSS. 	<p>This unit does an excellent job at targeting a set of grade level standards and presenting them in depth. The standards for mathematical practice are central to the unit and clearly identified in the unit overview. Lesson 6 and 8 explicitly state in the lesson where the math practices are occurring and using that practice to teach the math content standards. The author clearly handles the math practices in a grade appropriate way, identifying the word "structure" and then re-teaching that word to students. To make this unit stronger, the author could identify a math practice standard for each lesson and explicitly state the location of that practice as in lesson 6 and 8. One of the strengths of this unit is the balance of procedures and conceptual understanding. The circle graph at the beginning of each lesson depicting an estimated time for procedures and concepts is very helpful and well done.</p>
<p>Rating: 3 – Meets most to all of the criteria in the dimension</p>	

Dimension II – Key Shifts the CCSS

<p><i>The lesson/unit reflects evidence of key shifts that are reflected in the CCSS:</i></p> <ul style="list-style-type: none"> ✓ Focus: Lessons and units targeting the major work of the grade provide an especially in-depth treatment, with especially high expectations. Lessons and units targeting supporting work of the grade have visible connection to the major work of the grade and are sufficiently brief. Lessons and units do not hold students responsible for material from later grades. 	<p>This unit is extremely focused targeting the major work of the grade level in operations and algebraic thinking as well as number and operations in base ten.</p> <p>Coherence is another strength of this unit. The author explicitly states prior grade-level knowledge students must have, stating standards in an organized way for teachers to refer to. Within lessons, where appropriate, the author also does an excellent job pointing out specific areas that were to be mastered in previous grade levels regarding fluency expectations. In addition, the unit overview does an excellent job at summarizing and listing</p>
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<ul style="list-style-type: none"> ✓ Coherence: The content develops through reasoning about the new concepts on the basis of previous understandings. Where appropriate, provides opportunities for students to connect knowledge and skills within or across clusters, domains and learning progressions. ✓ Rigor: Requires students to engage with and demonstrate challenging mathematics with appropriate balance among the following: <ul style="list-style-type: none"> – Application: Provides opportunities for students to independently apply mathematical concepts in real-world situations and solve challenging problems with persistence, choosing and applying an appropriate model or strategy to new situations. – Conceptual Understanding: Develops students' conceptual understanding through tasks, brief problems, questions, multiple representations and opportunities for students to write and speak about their understanding. – Procedural Skill and Fluency: Expects, supports and provides guidelines for procedural skill and fluency with core calculations and mathematical procedures (when called for in the standards for the grade) to be performed quickly and accurately. 	<p>specific previous grade-level work and standards that students are expected to be proficient in. This is an added strength to the unit – allowing a teacher reteach specific standards for student who may not yet be proficient in one.</p> <p>This unit does a superb job at providing a balance between procedural skill, conceptual understanding and application. The authors explicitly state in each lesson the amount of time a teacher could devote to each of those three areas as well as pointing out the location of those in each lesson. A teacher could very quickly glance at a lesson and see what part of the lesson builds conceptual understanding, provides independent or collaborative application, and which builds skill or fluency practice. At the beginning of each lesson, the author also places a circle graph visually showing the amount of minutes that are devoted to fluency practice, concept development, and application.</p>
<p>Rating: 3 – Meets most to all of the criteria in the dimension</p>	

Dimension III – Instructional Supports

<p><i>The lesson/unit is responsive to varied student learning needs:</i></p> <ul style="list-style-type: none"> ✓ Includes clear and sufficient guidance to support teaching and learning of the targeted standards, including, when appropriate, the use of technology and media. ✓ Uses and encourages precise and accurate mathematics, academic language, terminology and concrete or abstract representations (e.g., pictures, symbols, expressions, equations, graphics, models) in the discipline. ✓ Engages students in productive struggle through relevant, thought-provoking questions, problems and tasks that stimulate interest and elicit mathematical thinking. ✓ Addresses instructional expectations and is easy to understand and use. ✓ Provides appropriate level and type of scaffolding, differentiation, intervention and support for a broad range of learners. <ul style="list-style-type: none"> – Supports diverse cultural and linguistic 	<p>This unit provides clear expectations and guidance to support teaching and learning. Teacher and expected student responses are explicitly stated which is well done. The authors point out specific mathematical vocabulary throughout lessons drawing students' attention to vocabulary terms, strategy names, and naming mathematical tools. For example, the teacher uses mathematical language like "difference" when referring to subtraction. One way to strengthen this unit would be to provide more opportunities for students to see number sentences written with the equal sign first instead of always at the end of a number sentence. Lesson 7 has students filling in a missing addend after the equal sign, but this is the only place this was seen through these three lessons.</p> <p>The unit provides many and varied ways to provide productive struggle. The teacher is directed to ask students "how" they solved a problem, or to show how they solved something, or to discuss with another student about their thinking. The suggested methods of instructional delivery are highly engaging relying on multiple ways to keep young students focused, using kinesthetic learning, oral responses, response boards, partner work, and independent practice.</p> <p>The units' instructional supports are excellent and gradually reduce supports needed. The exit ticket at the end of the lesson states that students may</p>
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<p>backgrounds, interests and styles.</p> <ul style="list-style-type: none"> - Provides extra supports for students working below grade level. - Provides extensions for students with high interest or working above grade level. <p><u>A unit or longer lesson should:</u></p> <ul style="list-style-type: none"> ✓ Recommend and facilitate a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share). ✓ Gradually remove supports, requiring students to demonstrate their mathematical understanding independently. ✓ Demonstrate an effective sequence and a progression of learning where the concepts or skills advance and deepen over time. ✓ Expect, support and provide guidelines for procedural skill and fluency with core calculations and mathematical procedures (when called for in the standards for the grade) to be performed quickly and accurately. 	<p>draw if that helps them, but essentially gives students a choice to use a strategy that is helpful to them. To make this unit stronger, some clarification could be added about the homework component. The unit provides a resource titled homework; however the lessons do not mention the homework component. Also, to make this unit stronger the author could be more explicit in listing different instructional supports to accommodate ELL students, and student above or below grade level.</p> <p>Another area that could strengthen this unit would be to include on the unit overview where and when students will use the skills gained in this module to apply in one and two step word problems to fully meet standard 2.OA.1.</p>
<p>Rating: 3 – Meets most to all of the criteria in the dimension</p>	

Dimension IV – Assessment

<p><i>The lesson/unit regularly assesses whether students are mastering standards-based content and skills:</i></p> <ul style="list-style-type: none"> ✓ Is designed to elicit direct, observable evidence of the degree to which a student can independently demonstrate the targeted CCSS. ✓ Assesses student proficiency using methods that are accessible and unbiased, including the use of grade-level language in student prompts. ✓ Includes aligned rubrics, answer keys and scoring guidelines that provide sufficient guidance for interpreting student performance. <p><u>A unit or longer lesson should:</u></p> <ul style="list-style-type: none"> ✓ Use varied modes of curriculum-embedded assessments that may include pre-, formative, summative and self-assessment measures. 	<p>This unit does an excellent job at assessing expected individual student learning outcomes through formative, self-assessment, and summative assessment. The unit exit slips directly link to the lesson objectives and overall unit standard objectives. To make this unit stronger, a list or narrative of expected exit slip student responses would be helpful in guiding the teacher in providing support and guidance to students that exceeded expectations or did not master expectations. The lessons direct a teacher to look for common misconceptions, however does not address what those misconceptions could be. A strength of this unit is the rubric provided for the summative assessment with an example of a student's work.</p>
<p>Rating: 3 – Meets most to all of the criteria in the dimension</p>	

Summary Comments

<p>This is an exemplar unit that allows all teachers and students to access materials with clear and organized expectations. The math practice standards are evident throughout the lessons and guide content instruction with a balance of conceptual understanding, procedural practice, and fluency. This unit allows for students to develop an in depth understanding of concepts through worthwhile activities and tasks in relevant contexts.</p>
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Reviewer 4

Dimension I – Alignment to the Depth of the CCSS

<p><i>The lesson/unit aligns with the letter and spirit of the CCSS:</i></p> <ul style="list-style-type: none">✓ Targets a set of grade-level CCSS mathematics standard(s) to the full depth of the standards for teaching and learning.✓ Standards for Mathematical Practice that are central to the lesson are identified, handled in a grade-appropriate way, and well connected to the content being addressed.✓ Presents a balance of mathematical procedures and deeper conceptual understanding inherent in the CCSS.	<p>Strengths: The unit and viewed lessons align very well to the targeted standards. There is a great mix of deep conceptual understanding and a great focus on having students decompose and compose numbers within base ten to add and subtract. The lesson presents an interesting and unique way of building students' knowledge of operations in base 10.</p>
<p>Rating: 3 – Meets most to all of the criteria in the dimension</p>	

Dimension II – Key Shifts the CCSS

<p><i>The lesson/unit reflects evidence of key shifts that are reflected in the CCSS:</i></p> <ul style="list-style-type: none">✓ Focus: Lessons and units targeting the major work of the grade provide an especially in-depth treatment, with especially high expectations. Lessons and units targeting supporting work of the grade have visible connection to the major work of the grade and are sufficiently brief. Lessons and units do not hold students responsible for material from later grades.✓ Coherence: The content develops through reasoning about the new concepts on the basis of previous understandings. Where appropriate, provides opportunities for students to connect knowledge and skills within or across clusters, domains and learning progressions.✓ Rigor: Requires students to engage with and demonstrate challenging mathematics with appropriate balance among the following:<ul style="list-style-type: none">– Application: Provides opportunities for students to independently apply mathematical concepts in real-world situations and solve challenging problems with persistence, choosing and applying an appropriate model or strategy to new situations.– Conceptual Understanding: Develops students' conceptual understanding through tasks, brief problems, questions, multiple representations and opportunities for students to write and speak about their understanding.– Procedural Skill and Fluency: Expects, supports and provides guidelines for	<p>Strengths: The unit and lessons align with the major focuses of the CCSS. In addition, the unit identifies what students should know coming from 1st grade and how that work of 1st grade connects to the 2nd grade standards. The lessons emphasize and offer a good balance of rigor in that fluency is practiced, and the concepts of sums and differences are developed and reinforced.</p> <p>Suggestions for Improvement: The concepts being developed are deeply linked to content in 3rd grade which can better be called out in the unit plan. Allow a few more opportunities for students to practice with real-world applications of the concepts and skills that are being developed through problem solving.</p>
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procedural skill and fluency with core calculations and mathematical procedures (when called for in the standards for the grade) to be performed quickly and accurately.

Rating: **3 – Meets most to all of the criteria in the dimension**

Dimension III – Instructional Supports

The lesson/unit is responsive to varied student learning needs:

- ✓ Includes clear and sufficient guidance to support teaching and learning of the targeted standards, including, when appropriate, the use of technology and media.
- ✓ Uses and encourages precise and accurate mathematics, academic language, terminology and concrete or abstract representations (e.g., pictures, symbols, expressions, equations, graphics, models) in the discipline.
- ✓ Engages students in productive struggle through relevant, thought-provoking questions, problems and tasks that stimulate interest and elicit mathematical thinking.
- ✓ Addresses instructional expectations and is easy to understand and use.
- ☐ Provides appropriate level and type of scaffolding, differentiation, intervention and support for a broad range of learners.
 - Supports diverse cultural and linguistic backgrounds, interests and styles.
 - Provides extra supports for students working below grade level.
 - Provides extensions for students with high interest or working above grade level.

A unit or longer lesson should:

- ✓ Recommend and facilitate a mix of instructional approaches for a variety of learners such as using multiple representations (e.g., including models, using a range of questions, checking for understanding, flexible grouping, pair-share).
- ✓ Gradually remove supports, requiring students to demonstrate their mathematical understanding independently.
- ✓ Demonstrate an effective sequence and a progression of learning where the concepts or skills advance and deepen over time.
- ✓ Expect, support and provide guidelines for procedural skill and fluency with core calculations and mathematical procedures (when called for in the standards for the grade) to be performed quickly and accurately.

Strengths:

The unit and lessons offer a plethora of information that allows you to understand the development of the concept and the lessons. Furthermore, the use of language stems (sentence frames) to help students precisely talk about sums and differences are developed as well as using precise language to talk about number within a base ten system (Say10). The unit as well as each lesson reviewed clearly articulates instructional expectations and provides an effective sequence for developing the content tied to the addressed standards. A major strength of this unit is also the consistent instructional design that specifically includes places for procedural skill and fluency. This consistency also helps to make the unit easy to read and vision in any classroom.

Suggestions for Improvement:

It would benefit students to have more opportunities to engage with problem solving in these lessons. By adding a few more opportunities for problem solving it will also push up the rigor. In addition, specifically calling out places where additional supports can be provided for diverse learners within the unit will help to provide better scaffolds and supports that can help all students; specifically thinking about how student learning is made accessible in the lesson through all 3 UDL Networks. The practice at the end of the lesson is called homework on the sheet (it's also hard to read on the top), but it is not referenced in the lesson. Consider referencing it in the lesson plan and maybe call it additional practice instead of homework.

Rating: 3 – Meets most to all of the criteria in the dimension

Dimension IV – Assessment

The lesson/unit regularly assesses whether students are mastering standards-based content and skills:

- ✓ Is designed to elicit direct, observable evidence of the degree to which a student can independently demonstrate the targeted CCSS.
- ✓ Assesses student proficiency using methods that are accessible and unbiased, including the use of grade-level language in student prompts.
- ☐ Includes aligned rubrics, answer keys and scoring guidelines that provide sufficient guidance for interpreting student performance.

A unit or longer lesson should:

- ✓ Use varied modes of curriculum-embedded assessments that may include pre-, formative, summative and self-assessment measures.

Strengths:

The unit has a great deal of formative assessments built into it in a thoughtful and consistent way and allows students to show what they know and can do independently. The use of daily exit slips in Lesson 7 and 8 show direct alignment to the final summative assessment will help catch students who are missing the concepts.

Suggestions for Improvement:

As part of the assessment piece, consider adding common misconceptions for the exit slips into the unit plan so that future users will have a way to address student errors. In addition, the rubric for the summative assessment reads more like an answer key instead of a rubric. Consider building a rubric that shows a progression toward mastery. Also consider adding onto your assessment or adjusting the assessment to include different ways for students to show mastery of the lessons.

Rating: 2 – Meets many of the criteria in the dimension

Summary Comments

- This is an excellent example of CCSS-Math units and lessons. It is focused, coherent and builds rigor through daily practice with fluency and diving deep into the conceptual understanding of sums and differences. The organization of the unit is easy to read and vision in a classroom. There is much thought to the assessments within the unit with targeted opportunities for formative assessment on a daily basis.

The major suggestions for improvement are:

- think of multiple ways to make the assessments accessible;
- adjust the rubric to read as a progression towards mastery, clearly stating what each level looks like in terms of student responses or their demonstration of proficiency; and
- build out more specific supports for diverse learners throughout the lessons.

Rating Scales

Rating Scale for Dimensions I, II, III, IV:

3: Meets most to all of the criteria in the dimension

2: Meets many of the criteria in the dimension

1: Meets some of the criteria in the dimension

0: Does not meet the criteria in the dimension

Overall Rating for the Lesson/Unit:

E: Exemplar – Aligned and meets most to all of the criteria in dimensions II, III, IV (**total 11 – 12**)

E/I: Exemplar *if* Improved – Aligned and needs some improvement in one or more dimensions (**total 8 – 10**)

R: Revision Needed – Aligned partially and needs significant revision in one or more dimensions (**total 3 – 7**)

N: Not Ready to Review – Not aligned and does not meet criteria (**total 0 – 2**)

Rating Descriptors

Descriptors for Dimensions I, II, III, IV:

3: **Exemplifies CCSS Quality** - meets the standard described by criteria in the dimension, as explained in criterion-based observations.

2: **Approaching CCSS Quality** - meets many criteria but will benefit from revision in others, as suggested in criterion-based observations.

1: **Developing toward CCSS Quality** - needs significant revision, as suggested in criterion-based observations.

0: **Not representing CCSS Quality** - does not address the criteria in the dimension.

Descriptor for Overall Ratings:

E: Exemplifies CCSS Quality – Aligned and exemplifies the quality standard and exemplifies most of the criteria across Dimensions II, III, IV of the rubric.

E/I: Approaching CCSS Quality – Aligned and exemplifies the quality standard in some dimensions but will benefit from some revision in others.

R: Developing toward CCSS Quality – Aligned partially and approaches the quality standard in some dimensions and needs significant revision in others.

N: Not representing CCSS Quality – Not aligned and does not address criteria.