

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

One of the issues that concerns student mastery is adequate exposure of specific skill content. For example, a student must correctly practice a skill over a short period (spaced) a threshold number of times (repetition). Spaced repetition is an efficient and effective means to reach the minimum number of repetitions for each student. General guidelines for the number of repetitions for most students are listed in the following table.

Student Classification	Number of Repetitions for Skill Mastery
Gifted and Talented Identified	1 to 4 repetitions
Regular Education	8 to 18 repetitions
Students Receiving Special Education Services	Varies widely from student to student – Consult each student’s Individual Education Plan and follow legal guidelines

Below are the general recommendations for specific skill areas using Amara supplemental daily resources. Due to student dynamics, each classroom’s teacher will experience different levels of intervention and presentation of each skill in a spaced repetition process. Therefore, spaced repetition pedagogy is unique for each classroom due to varying student ability in mathematics.

It is suggested that 4 to 9 skills be presented quickly in a highly accountable and energetic teaching mode for approximately 5 to 10 minutes at the onset or the end of the core lesson. *Many skills will require little time for students to master, but others may take more days for students to demonstrate mastery.* The document appears lengthy, but there is an abundance of commentary provided to inform teachers of specific pedagogy and examples. However, it is essential the classroom teacher is highly organized, prepared and plans a spaced repetition process that provides a quick transition between skills. Consistency is the key to success in most human endeavors, and this process is not an exception to that thinking.

The teacher should observe the students to determine which students require more practice until mastery of presented skills is accomplished. After skill mastery is achieved by all students, a teacher can drop that skill from the list below and add a new one. A variation in spaced repetition methodology is when the teacher presents a specific math skill each day until the majority of students have demonstrated skill proficiency. At that point, the teacher can engage students requiring additional practice in a small group setting while the other students complete independent work. Amara’s Skill Support Resources are designed for both types of pedagogy and are available on the Amara4education website for purchase. Also, it is recommended that with the use of Formative Loop’s daily numeracy program, students are provided a daily opportunity to master both math fact operational and process skills. (Note: www.formativeloop.com; www.thenew3rseducationconsulting.com; www.amara4education.com)

Class-wide accountability and comprehension checks can be done with small white boards, raising hands, a show of fingers to represent number answers, or paper and pencil to name a few. Teachers can position themselves to observe paper-pencil responses and identify specific students that demonstrate a lack of skill proficiency. Finally, please note that the skill list below is a guideline. A teacher should evaluate their students and adjust the list as they feel is appropriate to meet the needs of the students.

Use Amara Skill Support Packets as a resource on student assessment, homework or guided practice as needed. Additionally, the 4th grade spaced repetition is also referenced as well as the Formative Loop Scope and Sequence guide. Both are available for free download on their resource page.

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

Measurement warm-ups should be implemented starting with customary units followed by metric. Introduce units of measurement whole group instruction for basic conversions and always model the first couple of warm-ups. Then, allow students to work independently until they complete a series. Incorporate group model of multiplication/division to support conversions. All warm-ups are available on the Formative Loop “Resource Page” or on the website listed in the footer.

Week	Skills of the Week:	Execution/Delivery:	Assessment	Problem Solving
Week 1	1) Even/Odd 2) Missing Addends and Subtrahends 3) Place Value (Whole Numbers) 4) Math Facts Multiples 1 5) Measurement Warm-up	1) Use fingers to model “dance partners” for each digit. Example: 2 has a dance partner from each hand, but with 3 there is a finger left by itself; therefore 2 is even and 3 is odd. 2) Practice and reinforce equations daily that are “common knowledge” $35 + \underline{\quad} = 70$, $90 - \underline{\quad} = 45$. Always stress fact families. 3) Practice expanded, standard, mixed up ordering, and word form daily. Stress spelling and give practice for any words that are not spelled correctly. 4) Play multiples races and sing multiples songs to help struggling students. 5) Write out customary units of length and review whole group. Review and stress that a tile is 12 inches in length and that is 1 foot. Implement customary measurement warm-ups.	Student’s first assessment for their first grade in the gradebook will be at the end of week 2. Formative assessments (i.e., call/response, whiteboards, show me with your fingers...etc.) should be used daily to address gaps and correct practice errors. Homework and classwork practice should emulate the quiz. *Make it a goal for all students to pass addition and subtraction facts by the end of week 2 and multiplication and division facts by week 4.	Model Amara4education the entire first week to clarify expectations for how work is to be shown and how to think through the problem sentence by sentence. 30 minutes to finish one page. Students show work in boxes on blank page not on the page of the day. *Reinforce any problem set that is a challenge for at least 5 students the next day in class. Otherwise, handle conceptual issues individually or small group of students

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

<p>Week 2</p>	<p>1) Even/Odd 2) Missing Addends and Subtrahends 3) Place Value (Whole Numbers) 4) Math Facts Multiples 1 5) Measurement Warm-ups 6) Make 10 7) Make 100</p>	<p>1) Use fingers to model “dance partners” for each digit. Example: 2 has a dance partner from each hand, but with 3 there is a finger left by itself; therefore 2 is even and 3 is odd.</p> <p>2) Practice and reinforce equations daily that are “common knowledge” $35 + \underline{\quad} = 70$, $90 - \underline{\quad} = 45$. Always stress fact families.</p> <p>3) Practice expanded, standard, mixed up ordering, and word form daily. Stress spelling and give practice for any words that are not spelled correctly.</p> <p>4) Play multiples races and sing multiples songs to help struggling students.</p> <p>5) Write out customary units of length and review whole group. Review and stress that a tile is 12 inches in length and that is 1 foot.</p> <p>6) Students practice making 10 whole group.</p> <p>7) Students practice making 100 whole group.</p>	<p>Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p> <p>Introduce Upcoming skills for Monday on Friday.</p>	<p>Model Amara4education - students are expected to solve and select their own answer this week after teacher models thinking through the problem.</p> <p>30 minutes to finish one page.</p> <p>Students show work in boxes on blank page not on the page of the day.</p> <p>*Reinforce any problem set that is a challenge for all students the next day in class.</p>
<p>Week 3</p>	<p>1) Adding and Subtracting Whole Numbers 2) Adding and Subtracting Decimals 3) Magnitude of Decimals 4) Comparing Decimals 5) Place Value decimals 6) Measurement Warm-ups</p> <p>*Plus any review of skills that were difficult on the last assessment.</p>	<p>1) Complete 3-5 examples daily. Start small with 1000s and then build up to larger numbers to reinforce place value, regrouping, and borrowing.</p> <p>2) Complete 3-5 examples daily. Stress the idea of money, vertical alignment by place value and decimals, and finally drop the decimal at the end in your final answer.</p> <p>3) Reinforce the idea of money. Start with simple numbers (1.10) and then build to numbers such as 1.64. Use Make 10 and Make 100 skill to help decide how far away they are from each whole on a number line. Students complete 3-4 examples daily in the following format.</p>	<p>Use Amara Skill Resource Packets student sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p> <p>Introduce Upcoming skills for Monday on Friday.</p>	<p>Amara4education - students complete the entire sheet independently.</p> <p>30 minutes to finish one page. If they have difficulty with this make it a half page in 15 min. and build them up to the whole page.</p>

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

		<p>1.34) <u>0.34</u> away from <u>1.00</u> and <u>0.66</u> away from <u>2.00</u></p> <p>4) 3-5 examples daily with a focus on money.</p> <p>5) Magnitudes related to money. For example, about how much is the decimal 0.4534? Circle the money – 0.45. About how much is the decimal 2.03423 and 2.33333? Circle the money – 2.03 and 2.33. Note: Take the mystery out of decimals and all the place value by relating decimals to money. See 4th grade Amara Spaced Repetition for more information.</p> <p>6) Practice expanded, standard, mixed up ordering, and word form daily. Stress spelling and give practice for any words that are not spelled correctly.</p>		<p>*Reinforce any problem set that is a challenge for all students the next day in class.</p> <p>Students show work in boxes on blank page not on the page of the day.</p> <p>*Reinforce any problem set that is a challenge for all students the next day in class.</p>
Week 4	<p>1) Rounding</p> <p>2) Estimating Sums and Differences Whole Numbers</p> <p>3) Estimating Sums and Differences Decimals</p> <p>4) Order of Operations -- PEMDAS</p> <p>5) Compression Method/ Prime Comp.</p> <p>6) Measurement Warm-ups</p> <p>*Plus any review of skills that were difficult on the last assessment.</p>	<p>1) 3-5 examples up to the nearest 10,000.</p> <p>2) Stress to round before you perform the operation. Practice skill to the 100,000 place. 3-5 examples</p> <p>3) Stress to round before you operate. Practice skill to the thousandths place value. 3-5 examples.</p> <p>4) 3-5 examples daily. *It helps students to make a T-chart showing the difference between factors and multiples as well as using the kinesthetic vocabulary.</p> <p>5) Start with 1-10 and then build on that every day. This skill may be spiraled in for a couple of weeks depending on the group.</p>	<p>Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p> <p>Introduce Upcoming skills for Monday on Friday.</p> <p>Use 4th grade Amara Spaced Repetition to better understand the "Compression Method." Also, available as a download on Formative Loop Resource page.</p>	<p>Amara4education and students complete the entire sheet independently.</p> <p>30 minutes to finish one page.</p> <p>Students show work in boxes on blank page not on the page of the day.</p> <p>*Reinforce any problem set that is a challenge for all students the next day in class.</p>

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

<p>Week 5</p>	<p>1) Multiplying Whole Numbers 2 x 2 and 2 x 3 2) Estimating Whole Number Products 3) Compression Method/P &C. 4) Measurement Warm-ups *Plus any review of skills that were difficult on the last assessment.</p>	<p>1) 5-6 examples Implement group model, with labels for what the quantities represent, for understanding multiplication in problem solving situations in addition to reviewing the algorithm. Use the 4th grade Amara Spaced Repetition to better understand the Group Models for multiplication and division. 2) Stress to round before the student completes the operation. 3) Continue building on the list from the prior week.</p>	<p>Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday. Incorporate at least 5 word problems to assess student knowledge of the significance of the values represented in the problem when the circle model is applied. Introduce Upcoming skills for Monday on Friday.</p>	<p>Amara4education and students complete the entire sheet independently. 30 minutes to finish one page. Students show work in boxes on blank page not on the page of the day. *Reinforce any problem set that is a challenge for all students the next day in class.</p>
<p>Week 6</p>	<p>1) Multiplying Decimals 2) Estimating Decimal Products 3) Spiral Multiplication and Estimation of Whole numbers 4) Measurement Warm-ups *Plus any review of skills that were difficult on the last assessment.</p>	<p>1) Stress that the decimal is not dropped. Rather the spaces are counted behind the decimals of both numbers and that is how many spaces to move the decimal to the left. Relate to decimal grid models and verify students are properly shading grids. 2) Focus on estimating money as a starting point. This is a way to check if the estimation is reasonable. 3) Reinforce problem solving situations and the multiplication group model, so students understand the physical elements of math. (Use the Amara Skill Resource Packet for student sheets).</p>	<p>Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday. Incorporate at least 5 word problems to assess student knowledge of the significance of the values represented in the problem when the circle model is applied.</p>	<p>Amara4education and students complete the entire sheet independently. 30 minutes to finish one page. Students show work in boxes on blank page not on the page of the day. *Reinforce any problem set that is a challenge for all</p>

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

			Introduce Upcoming skills for Monday on Friday.	students the next day in class.
Week 7	<p>1) Division of Whole Numbers 2) Remainders in the group model 3) Division of Decimals</p> <p>4) Measurement Warm-ups *Plus any review of skills that were difficult on the last assessment.</p>	<p>1) Start slow on the basic algorithm review 2 digit divided by 1 digit and 3 digit divided by 1 digit and progress to 3 digit divide by 2 digit and 4 digit divided by 2 digit. Show how the circle model is used for division. The total is always at the top. And always label the numbers with what they represent. Make sure you review vocabulary for the parts of the equation both for the algorithm and an equation that is written horizontally.</p> <p>2) Understand the different values of the remainder. Am I collecting money so I need another “group”, or am I distributing items so I now have “x” left over.</p> <p>3) Review algorithm and stress that the decimal is raised up to the “roof” if it’s in the “house”. Relate to decimal grids and that each section must end up with the quotient and the total shades should be the dividend.</p>	<p>Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p> <p>Incorporate at least 5 word problems to assess student knowledge of the significance of the values represented in the problem when the circle model is applied.</p> <p>Introduce Upcoming skills for Monday on Friday.</p>	<p>Amara4education and students complete the entire sheet independently.</p> <p>30 minutes to finish one page.</p> <p>Students show work in boxes on blank page not on the page of the day.</p> <p>*Reinforce any problem set that is a challenge for all students the next day in class.</p>
Week 8	<p>1) Division of Whole Numbers 2) Remainders in the group model 3) Division of Decimals</p> <p>3) Measurement Warm-ups *Plus any review of skills that were difficult on the last assessment.</p>	<p>1) Start slow on the basic algorithm review 2 digit divided by 1 digit and 3 digit divided by 1 digit and progress to 3 digit divide by 2 digit and 4 digit divided by 2 digit. Show how the circle model is used for division. The total is always at the top. And always label</p> <p>2) Understand the different values of the remainder. Am I collecting money so I need another “group”, or am I distributing items so I now have “x” left over.</p>	<p>Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p> <p>Incorporate at least 5 word problems to assess student</p>	<p>Amara4education and students complete the entire sheet independently.</p> <p>30 minutes to finish one page.</p> <p>Students show work in boxes on blank</p>

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

		3) Review algorithm and stress that the decimal is raised up to the “roof” if it’s in the “house”. Relate to decimal grids and that each section must end up with the quotient and the total shades should be the dividend.	knowledge of the significance of the values represented in the problem when the circle model is applied. Introduce Upcoming skills for Monday on Friday.	page not on the page of the day. *Reinforce any problem set that is a challenge for all students the next day in class.
Week 9	1) Estimating Division 2) Fractions 3) Improper Fractions to mixed numbers 4) Proper fractions to decimals. 5) Measurement Warm-ups *Plus any review of skills that were difficult on the last assessment.	1) Follow formative loop steps and stress the importance of an over estimate vs an underestimate. Allow about a 2 week practice while incorporating the circle model. 2) Define that a fraction is always two things. 1) Part of a whole. 2) Division problem. Review it daily. 3) Follow formative loop scope and sequence steps and show how to check. Use Amara Skill Resource Packets for student opportunity sheets.	Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday. Introduce Upcoming skills for Monday on Friday.	Amara4education and students complete the entire sheet independently. 30 minutes to finish one page. Students show work in boxes on blank page not on the page of the day. *Reinforce any problem set that is a challenge for all students the next day in class.
Week 10	1) Estimating Division 2) Fractions 3) Improper Fractions to mixed numbers 4) Proper fractions to decimals. 5) Measurement Warm-ups	1) Follow formative loop steps and stress the importance of an over estimate vs an underestimate. Allow about a 2 week practice while incorporating the circle model. 2) Define that a fraction is always two things. 1) Part of a whole. 2) Division problem. Review it daily. 3) Follow formative loop steps and show how to check.	Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday. Introduce Upcoming	Amara4education and students complete the entire sheet independently. 30 minutes to finish one page.

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

	<p>*Plus any review of skills that were difficult on the last assessment.</p>	<p>Use Amara Skill Resource Packets for student opportunity sheets.</p>	<p>skills for Monday on Friday.</p>	<p>Students show work in boxes on blank page not on the page of the day.</p> <p>*Reinforce any problem set that is a challenge for all students the next day in class.</p>
<p>Week 11</p>	<p>1) Number Lines 2) Equivalent Fractions 3) Multiplication of a Fraction and Whole number 4) Multiplication of a fraction by another fraction 5) Measurement Warm-ups</p> <p>*Plus any review of skills that were difficult on the last assessment.</p>	<p>1) Implement steps daily and slowly based on formative loop scope. As you progress through each number line allow students to complete independently as the week goes on. Allow about two weeks for both number line sheets.</p> <p>2) 3-5 examples daily using formative loop steps.</p> <p>3) Follow formative loop steps and make sure students relate it to a model.</p> <p>4) Follow formative loop steps relating it to the decimal grids from multiplying decimals.</p> <p>Use Amara Skill Resource Packets for student opportunity sheets.</p>	<p>Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p> <p>Introduce Upcoming skills for Monday on Friday.</p>	<p>Amara4education and students complete the entire sheet independently.</p> <p>30 minutes to finish one page.</p> <p>Students show work in boxes on blank page not on the page of the day.</p> <p>*Reinforce any problem set that is a challenge for all students the next day in class.</p>
<p>Week 12</p>	<p>1) Number Lines 2) Equivalent Fractions 3) Multiplication of a Fraction and Whole number 4) Multiplication of a fraction by another fraction 5) LCM</p>	<p>1) Implement steps daily and slowly based on formative loop scope. As you progress through each number line allow students to complete independently as the week goes on. Allow about two weeks for both number line sheets.</p> <p>2) 3-5 examples daily using formative loop steps.</p>	<p>Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p>	<p>Amara4education and students complete the entire sheet independently.</p> <p>30 minutes to finish one page.</p>

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

	<p>6) GCF</p> <p>7) Measurement Warm-ups</p> <p>*Plus any review of skills that were difficult on the last assessment.</p>	<p>3) Follow formative loop steps and make sure students relate it to a model.</p> <p>4) Follow formative loop steps relating it to the decimal grids from multiplying decimals.</p> <p>5) Practice finding the LCM of two given numbers.</p> <p>6) Practice finding GCF for two numbers as you revisit compression method.</p> <p>*It helps students to make a T-chart showing the difference between factors and multiples as well as using the kinesthetic vocabulary.</p>	<p>Introduce Upcoming skills for Monday on Friday.</p> <p>Use Amara Skill Resource Packets for student opportunity sheets.</p>	<p>Students show work in boxes on blank page not on the page of the day.</p> <p>*Reinforce any problem set that is a challenge for all students the next day in class.</p>
<p>Week 13</p>	<p>1) LCM</p> <p>2) GCF</p> <p>3) Reducing Fractions</p> <p>4) Adding and Subtracting Fractions (Proper and Improper)</p> <p>5) Measurement Warm-ups</p> <p>*Plus any review of skills that were difficult on the last assessment.</p>	<p>1) 1-3 examples, incorporate the denominators of the practice problems students will have on number 4.</p> <p>2) 1-3 examples, incorporate the numerators and denominators students will see in number 4.</p> <p>3) 3-4 examples, Model slowly and make sure students learn to check that no other factor is left in common after they think they have reduced, except “1” they know they are at “one and done”.</p> <p>4) 1-3 examples to slowly model the relationship of the skills in 1, 2, and 3 of this week.</p>	<p>Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p> <p>Introduce Upcoming skills for Monday on Friday.</p> <p>Use Amara Skill Resource Packets for student opportunity sheets.</p>	<p>Amara4education and students complete the entire sheet independently.</p> <p>30 minutes to finish one page.</p> <p>Students show work in boxes on blank page not on the page of the day.</p> <p>*Reinforce any problem set that is a challenge for all students the next day in class.</p>
<p>Week 14</p>	<p>1) LCM</p> <p>2) GCF</p> <p>3) Reducing Fractions</p> <p>4) Adding and Subtracting Fractions</p>	<p>1) 1-3 examples, incorporate the denominators of the practice problems students will have on number 4.</p> <p>2) 1-3 examples, incorporate the numerators and</p>	<p>Use formative loop sheets for assessment on Thursday and review any trouble areas</p>	<p>Amara4education - students complete the entire sheet independently.</p>

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

	<p>(Proper and Improper)</p> <p>5) Measurement Warm-ups</p> <p>*Plus any review of skills that were difficult on the last assessment.</p>	<p>denominators students will see in number 4.</p> <p>3) 3-4 examples, Model slowly and make sure students learn to check that no other factor is left in common after they think they have reduced, except “1” they know they are at “one and done”.</p> <p>4) 1-3 examples to slowly model the relationship of the skills in 1, 2, and 3 of this week.</p>	<p>immediately and on Friday.</p> <p>Introduce Upcoming skills for Monday on Friday.</p> <p>Use Amara Skill Resource Packets for student opportunity sheets.</p>	<p>30 minutes to finish one page.</p> <p>Students show work in boxes on blank page not on the page of the day.</p> <p>*Reinforce any problem set that is a challenge for all students the next day in class.</p>
Week 15	<p>1) Adding and Subtracting Fractions</p> <p>2) Adding and Subtracting Mixed Numbers</p> <p>3) Reducing Fractions</p> <p>4) Measurement Warm-ups</p> <p>*Plus any review of skills that were difficult on the last assessment.</p>	<p>1) 3-5 examples.</p> <p>2) 3-5 Examples, following the steps in formative loop scope.</p> <p>3) Continue to practice with all addition and subtraction problems.</p>	<p>Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p> <p>Introduce Upcoming skills for Monday on Friday.</p>	
Week 16	<p>1) Adding and Subtracting Fractions</p> <p>2) Adding and Subtracting Mixed Numbers</p> <p>3) Reducing Fractions</p> <p>4) Adding and Subtracting Proper Fraction and a decimal</p> <p>5) Measurement Warm-ups</p>	<p>1) 3-5 examples.</p> <p>2) 3-5 Examples, following the steps in formative loop scope.</p> <p>3) Continue to practice with all addition and subtraction problems.</p> <p>4) #29 in Formative Loop scope and sequence – Review 4th grade Amara Scope for Reducing Fractions.</p>	<p>Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p> <p>Introduce Upcoming skills for Monday on Friday.</p>	

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

	*Plus any review of skills that were difficult on the last assessment.	5.) Use Amara Skill Resource Packets for student opportunity sheets.		
Week 17	Reinforce any skill that was taught this semester and verify mastery on adding and subtracting fractions.		Use formative loop sheets for assessment on Thursday and review any trouble areas immediately and on Friday. Introduce Upcoming skills for Monday on Friday.	
Week 18	Reinforce any skill that was taught this semester and verify mastery on adding and subtracting fractions.	In the spring there will be a brief time for review of these first semester skills, however #26 in the Formative Loop scope takes a lot of practice before mastery as well as the progression for #31 and #32. So, it is vital that students are ready to move forward from these skills at this point.		

Spring Semester

Continue spiraling through skills and reviewing what is necessary for students to be successful on Amara4education. Focus on pulling intervention groups based on Amara4education completion.

Continue working through measurement warm-ups as they progress. They will finish a few weeks out from the STAAR. If they do, reinforce them when perimeter area and volume are covered.

Although the next few weeks are repetitive, it is important to make sure these last few items on the scope and sequence are taught thoroughly and assessed frequently. With each assessment note where students are having difficulty and go back to that skill within your core or address one on one if it's a small

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

group of students. Do not assume they are 'good to go' until all items are assessed and taught or even the students who have mastered previous skills will begin to show gaps.

Week 19	<p>Review week/ Introduction of #26 from Scope and Sequence</p> <p>1) Adding and Subtracting Fractions 2) Adding and Subtracting Mixed Numbers 3) Reducing Fractions 4) Adding and Subtracting Proper Fraction and a decimal 5) #26 Formative Loop A 6) Measurement Warm-ups</p> <p>*Plus any review of skills that were difficult on the last assessment.</p>	<p>1) 2-4 examples.</p> <p>2) 2-4 Examples, following the steps in formative loop scope.</p> <p>3) 1-3 examples. Continue to practice with all addition and subtraction problems.</p> <p>4) #29 in Formative Loop scope and sequence.</p> <p>5) Division of a Whole Number by a fraction, introduce slowly. With a focus on models showing that if you build the model following the equation step by step the answer is the quantity of total fractional pieces made.</p>	<p>No Assessment this week, focus on review of skills including multiplication, division, and any other trouble skills from the first semester.</p>	<p>Model amara4education for 30 minutes showing students how to complete work. Do not assume they will complete it as they completed America Math in the Fall. You must model the complexity of these problems and how to work through them on the blank page that is available in the book with boxes for each problem.</p> <p>The teacher should complete the next day's page in advance to make sure they can include any pre-teach or review during class. And to ensure students are completing all the work that is necessary for the day's page.</p>
Week 20	<p>1) Division of a Whole Number 2) Division of a Fraction by a Whole Number 3) Geometry 4) Perimeter</p>	<p>1) 2-4 Examples daily Division of a Whole Number by a fraction, introduce slowly. With a focus on models showing that if you build the model following the equation step by step the answer is the quantity of total fractional pieces made.</p>	<p>Use formative loop and Amara Skill Resource Packet sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p>	<p>Students resume to working on these pages independently.</p>

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

	<p>5) Area</p> <p>6) Financial Literacy (vocabulary)</p>	<p>2) 2-4 examples daily Division of a fraction by a whole number, introduce slowly. With a focus on models showing that if you build the model following the equation step by step the answer is the quantity of total fractional pieces made.</p> <p>3) Review #30 in Formative Loop and focus on polygons and quadrilaterals this week.</p> <p>4) # 31 in Formative Loop start simple with the basic formulas for perimeter.</p> <p>5) #31 Formative loop start simple with basic formula for area.</p> <p>6) Introduce 5 words a day building up to the full list according to Motivation Math glossary.</p>	<p>Introduce Upcoming skills for Monday on Friday.</p> <p>Use Amara Skill Resource Packets for student opportunity sheets for modeling sheets.</p>	<p>Show all work on assigned squares.</p> <p>Make not of any skills that MUST be reviewed whole group during core instruction the next day.</p>
<p>Week 21</p>	<p>1) Division of a Whole Number</p> <p>2) Division of a Fraction by a Whole Number</p> <p>3) Geometry</p> <p>4) Perimeter</p> <p>5) Area</p> <p>6) Volume</p> <p>7) Financial Literacy (vocabulary)</p>	<p>1) 2-4 Examples daily Division of a Whole Number by a fraction, introduce slowly. With a focus on models showing that if you build the model following the equation step by step the answer is the quantity of total fractional pieces made.</p> <p>2) 2-4 examples daily Division of a fraction by a whole number, introduce slowly. With a focus on models showing that if you build the model following the equation step by step the answer is the quantity of total fractional pieces made.</p> <p>3) Review #30 in Formative Loop scope and sequence and focus on triangles this week.</p> <p>4) # 31 in Formative Loop scope and sequence start to add a given perimeter and students must figure out the side or sides of a given polygon or quadrilateral.</p>	<p>Use formative loop and Amara Skill Resource Skill sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p> <p>Introduce Upcoming skills for Monday on Friday.</p> <p>Use Amara Skill Resource Packets for student opportunity sheets for modeling sheets.</p>	

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

		<p>5) # 31 in Formative Loop scope and sequence start to add a given area and students must figure out the side or sides of a quadrilateral.</p> <p>6) Volume start with basic formula for volume for a cube and a rectangular prism.</p> <p>7)) Introduce 5 words a day building up to the full list according to Motivation Math glossary.</p>		
<p>Week 22</p>	<ol style="list-style-type: none"> 1) Division of a Whole Number 2) Division of a Fraction by a Whole Number 3) Geometry 4) Perimeter 5) Area 6) Volume 7) Financial Literacy (vocabulary) 	<ol style="list-style-type: none"> 1) 2-4 Examples daily Division of a Whole Number by a fraction, introduce slowly. With a focus on models showing that if you build the model following the equation step by step the answer is the quantity of total fractional pieces made. 2) 2-4 examples daily Division of a fraction by a whole number, introduce slowly. With a focus on models showing that if you build the model following the equation step by step the answer is the quantity of total fractional pieces made. 3) Review #30 in Formative Loop and focus on triangles this week. 4) # 31 in Formative Loop scope and sequence. Start to add a given perimeter and students must figure out the side or sides of a given polygon or quadrilateral. 5) # 31 in Formative Loop scope and sequence. Start to add a given area and students must figure out the side or sides of a quadrilateral. 6) Volume start with a given volume and student must come up with the missing dimensions for a cube and a rectangular prism. 	<p>Use formative loop or Amara Skill Resource Skill Packet sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p> <p>Use Amara Skill Resource Packets for student opportunity sheets for modeling sheets.</p> <p>Introduce Upcoming skills for Monday on Friday.</p>	

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

		7) Introduce 5 words a day building up to the full list according to Motivation Math glossary.		
Week 23	<ul style="list-style-type: none"> 1) Division of a Whole Number 2) Division of a Fraction by a Whole Number 3) Geometry 4) Perimeter 5) Area 6) Volume 7) Financial Literacy (vocabulary) 	<p>1) 2-4 Examples daily Division of a Whole Number by a fraction, introduce slowly. With a focus on models showing that if you build the model following the equation step by step the answer is the quantity of total fractional pieces made.</p> <p>2) 2-4 examples daily Division of a fraction by a whole number, introduce slowly. With a focus on models showing that if you build the model following the equation step by step the answer is the quantity of total fractional pieces made.</p> <p>3) Review #30 in Formative Loop and focus on triangles this week.</p> <p>4) # 31 in Formative Loop start to add a given perimeter and students must figure out the side or sides of a given polygon or quadrilateral.</p> <p>5) # 31 in Formative Loop start to add a given area and students must figure out the side or sides of a quadrilateral.</p> <p>6) Volume start with a given volume and student must come up with the missing dimensions for a cube and a rectangular prism.</p> <p>7) Introduce 5 words a day building up to the full list according to Motivation Math glossary.</p>	<p>Use formative loop or Amara Resource Skill Packet sheets for assessment on Thursday and review any trouble areas immediately and on Friday.</p> <p>Introduce Upcoming skills for Monday on Friday.</p> <p>Use Amara Skill Resource Packets for student opportunity sheets for modeling sheets.</p>	
Week 24	<ul style="list-style-type: none"> 1) Division of a Whole Number 2) Division of a Fraction by a Whole Number 	<p>1) 2-4 Examples daily Division of a Whole Number by a fraction, introduce slowly. With a focus on models showing that if you build the model following the equation step by step the answer is the quantity of total fractional pieces made.</p>	<p>Use formative loop sheets for assessment on Thursday and review any trouble areas</p>	

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

	<p>3) Geometry</p> <p>4) Perimeter</p> <p>5) Area</p> <p>6) Volume</p> <p>7) Financial Literacy (vocabulary)</p>	<p>2) 2-4 examples daily Division of a fraction by a whole number, introduce slowly. With a focus on models showing that if you build the model following the equation step by step the answer is the quantity of total fractional pieces made.</p> <p>3) Review #30 in Formative Loop scope and sequence and focus on triangles this week.</p> <p>4) # 31 in Formative Loop start to add a given perimeter and students must figure out the side or sides of a given polygon or quadrilateral.</p> <p>5) # 31 in Formative Loop start to add a given area and students must figure out the side or sides of a quadrilateral.</p> <p>6) Volume start with a given volume and student must come up with the missing dimensions for a cube and a rectangular prism.</p> <p>7) Introduce 5 words a day building up to the full list according to Motivation Math glossary.</p>	<p>immediately as well as on Friday.</p> <p>Use Amara Skill Resource Packets for readymade student modelling sheets.</p> <p>Introduce Upcoming skills for Monday on Friday.</p>	
<p>Week 25</p>	<p>STAAR Prep # 1-6</p> <p>Measurement Warm-ups -They might almost be done by now, continue to work through these and review some previous sheets as well at this point in the year.</p>	<p>In these last few weeks...</p> <p>Model the first couple of Preps to scaffold expectations for students. With any Prep always review during your planning time to make note of anything that must be done whole group if it is the first time they've seen that format of a problem. Model the problem with different variables within the same steps.</p> <p>Complete One Amara4education page in addition to the regularly scheduled page to keep the students practicing after they finish the Prep of the day.</p> <p>Example: Student A is done with the Prep of the day they can get a head start on the regular page for</p>	<p>STAAR Preps (Available on Formative Loop Resource Page) and Amara4education serve as a daily assessment.</p>	

GRADE 5 - AMARA SPACED REPETITION SEQUENCING RECOMMENDATIONS

		Amara4education and move ahead by one page after that page. (Only one page)		
Week 26	STAAR Preps # 7-12		STAAR Preps (Formative Loop) and Amara4education serve as a daily assessment.	
Week 27	STAAR Preps # 13-18		STAAR Preps (Formative Loop) and Amara4education serve as a daily assessment.	
Week 28	STAAR Preps #19-24		STAAR Preps (Formative Loop) and Amara4education serve as a daily assessment.	
Week 29	STAAR Prep #24 and 25 STAAR TESTING	Monday is the last warm- up and Amara4education sheet. Begin 6th grade material or review students for SSI second assessment		

Author’s Note: A daily spaced repetition session should require between 5 to 12 minutes of time. However, some teachers vary this time depending upon the skill and circumstances in their classrooms. It is important to note that the teacher must be highly organized in order to move quickly through the process and maintain student engagement. It is highly recommended that the teacher use a diagnostic medium in these sessions. For example, students that struggle academically should be seated in the classroom so the teacher can readily observe their work and accuracy. As those students master the skills, then the teacher knows to replace the mastered skill with a new one. The teacher can also work with those few students either individually or in a small group to ensure that they master the skill at a later time in the class or day. ***A teacher’s objective must be mastery of grade level math skills by ALL students or a numeracy gap will foment and widen in later grades.***

Additionally, a couple weeks later, for instance, the teacher can **spiral review** to previously presented math skills and guarantee with absolute certitude --- that all students have indeed mastered grade level or prior grade level skill(s). *Application mathematics* in the arithmetic elementary grades are generally given in the form of a short ‘story’ or ‘word’ problem. These word problems are nothing more than a combination of discrete arithmetic skills listed in this document. If those arithmetic skills are fundamentally founded and mastered, there is a high probability that students will not be overwhelmed and easily solve arithmetically application problems correctly.