

**UMF Unit-Wide Lesson Plan Template**

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| Name: Bryan Eldridge | Program: Elementary Education | Course: EDU 450 |
| Lesson Topic / Title: Decomposing fractions |
| Lesson Date: 3/25/19 | Lesson Length: 50 minutes | Grade/Age: 4th grade  |
| Learning Objectives & Content Standard Alignment - Selects, creates, and sequences learning experiences and performance tasks that support learners in reaching rigorous curriculum goals based on content standards. |
| Learning Objective(s) Students will be able to decompose fractions into smaller units with the same denominator.Students will be able to add the sum of smaller units to make a fraction.Targets:I can break apart a fraction into smaller pieces with the same denominatorI can add smaller pieces together to make a fractionSuccess Criteria:Students will complete page 155 in their math books completely and accurately, with at least half of the problems completed.Students will be able to complete 191 completely and accurately, with at least half of the problems completed.  | Instructional Decisions / ReasoningThese objectives align with the outlined targets that correlate to Auburn’s district targets. The students will complete these objectives to become more familiar with the introductory level of adding and subtracting fractions through decomposition. The success criteria outline the specific areas in which I will be able to gauge my student’s levels of understanding and success with the lesson. The targets are implemented to produce more age appropriate vocabulary for the students to view and understand while working through the lesson. These targets will be posted throughout the lesson and revisited as needed to check for understanding with the students. |
| Content Standard(s)MA.04.NSF.01.04Is skilled at decomposing a fraction into a sum of fractions with the same denominator. [CCSS.MATH.CONTENT.4.NF.B.3.B](http://www.corestandards.org/Math/Content/4/NF/B/3/b/)Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. *Examples: 3/8 = 1/8 + 1/8 + 1/8 ; 3/8 = 1/8 + 2/8 ; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8*. | Instructional Decisions / Reasoning**MA.04.NSF.01.04**This standard is designed to align with the Auburn school district’s targets and work in conjunction with the outlined objectives to begin the process in adding and subtracting fractions. This target is designed to be met by the end of the first day and will be individually assessed to monitor progression in the unit.The common core standard outlines the state specific target that the student’s will be completing. While this standard isn’t directly aligned to the Auburn target, it implies the same knowledge and understanding the students are expected to achieve. |
| Assessment - Uses assessment flexibly to expand and deepen understanding of learner performance and determines best supports for continued learner growth. |
| Assessment**Pre-assessment**The students will be given an overall pre-assessment in the beginning of the math lesson, encompassing all the material that the students will be learning over the next 5 lessons. The assessment is designed to have students test their current understanding of fraction decomposition, addition and subtraction to further implement more support in the coming lessons around the material. The pre-assessment will cover 11 questions and will be reviewed after the students complete them and turn it in. **Formative Assessment (group and independent work):**Students that need more support will meet with me in a smaller group following the mini-lesson to engage in a more supported example of how to do that day’s lesson. At this time, students will be given the opportunity to learn different strategies to solve the work they’re given and have instruction given that’s tailored to their current level of understanding. Students that aren’t meeting with me will be working on supplemental material at this time such as the assigned worksheet or daily challenge. During the group work students will be reminded of that day’s expectations with the assigned work.**Exit tickets: (formative)**Students will complete an exit ticket at the end of the math lesson where they will practice the material that was covered in class. This will be turned in before they leave and also reviewed to check for understanding and monitor what changes need to be made individually in the future lessons. | Instructional Decisions / Reasoning**Pre-assessment:**This pre-assessment is designed to gauge the current level of understanding that the students possess entering into the day’s lesson. This assessment will be done individually and collected to determine what information needs to be covered more in-depth and what is well understood. The same assessment will later be used at the end of the unit as a post-test to see the growth made by the students from the start to finish of the unit. Students will answer 11 questions that encompass all of the material we will cover for the week. **Formative assessment:**The group work is formatively assessing the students through their levels of completion and whether or not they understood the expectations fully. By passing in their work, the students are able to have their answers checked and reviewed and in turn have future lessons that are designed to be more suited towards their level of understanding. The exit tickets are designed to act formatively and assess student understanding but also provide the students with an opportunity to explain their understanding of what they learned and practice doing the material on their own. |
| Instructional Materials and Resources - Stays current in content knowledge and expands expertise in reviewing instructional materials from the perspectives of both the discipline and individual learner needs.  |
| Materials, Resources, and / or Technology**Materials:**PencilsWhiteboardWhiteboard markersBase-10 blocks**Resources:**Math worksheets (decomposing fractions and home link page)Daily challenge paperPre-assessment handoutMatrices**Technology:**iPadsSmartboard (projecting daily schedule) | Instructional Decisions / ReasoningThese materials and resources are being used to best support student learning and provide the most engaging lesson for everyone. By providing hands-on materials as well as practicing work with the students, there are more opportunities to define the expectations and understand the material. Each of these tools are used to provide learning support and guidance beyond direct instruction. Rev 8/17 |
| Instructional Methods: Selects, creates, and sequences learning experiences and performance tasks by using a variety of instructional approaches, strategies, and technologies that make learning accessible to all learners and support learners in reaching rigorous curriculum goals.  |
| Teaching and Learning Sequence**Mini-Lesson (10 minutes)**Students will work as a whole group at the beginning of class to cover a sample of the material they will be working on that day. During this time, students will follow along and copy the work that I model on the board on the handouts they’re given. This will also be when the day’s expectations and goals will be explained to the students.**Group work (10 minutes in group, 30 minutes total)**Students that need more support will meet with me in a smaller group following the mini-lesson to engage in a more supported example of how to do that day’s lesson. At this time, students will be given the opportunity to learn different strategies to solve the work they’re given and have instruction given that’s tailored to their current level of understanding. Students that aren’t meeting with me will be working on supplemental material at this time such as the assigned worksheet or daily challenge. During the group work students will be reminded of that day’s expectations with the assigned work.**Exit tickets/Matrices (10 minutes)**Students will take the final 10 minutes of the day to fill out their exit tickets they’ve been given as well as their personal matrices to self-assess themselves on their progress as well as give me an idea of where they are in their understanding. During this time, I will also be collecting the work they did for the day to review and monitor the progress they made for future instruction. | The introductory mini-lesson is designed to give the students an opportunity to review and learn the material they will be covering for the day with a whole group. The model and follow structure allows students to have questions answered in a whole group as well as address any misconceptions students may have with the content. The group work is designed to work with students at their individual learning levels and support their growth. By meeting in groups students have the opportunity to learn the material in a more comfortable and supportive manner that is suitable for them.The exit tickets serve as a final opportunity to understand and practice the material before students finish with math for the day. This also serves as a final check-in and another assessment strategy to ensure understanding and progress monitor.  |
| Meeting students’ needs (differentiation, extensions, modifications, accommodations)**Modifications:**This lesson will be modified for students such as H and W that may need more practice with the material by creating a separate handout. This work will follow the same instruction and expectations as the rest of the class but will be more suitable to their understanding based on their struggles with word problems.**Accommodations:**This lesson provides two accommodations for the students to utilize. The first accommodation being made is through the use of base-10 blocks which allow students to have a visual and tactile aid in breaking apart fractions. This resource encourages students to be engaged with the learning and also accommodates the learning for students that are more visual or tactile with their learning such as I and W. Another accommodation being made is through the daily challenge worksheets. Students are being given the opportunity to practice the material that directly relates to that day’s lesson before coming to the group to meet with me. This accommodation allows for students that need more practice or learn better by doing the work to have equal opportunities for success. **Differentiation:**This lesson is being differentiated simply through the various learning needs of each group that I meet with. While each group is working on the same material, each group may work at a different pace which will in turn effect the levels of understanding as well as the progression in the unit. In addition, the lesson is being differentiated amongst the groups through the change in vocabulary and support type that the students receive. For group 4, more basic vocabulary terms such as “break down” rather than “decompose” may be used, while for other groups, such as group 2, a more in-depth explanation may be given in place of the vocabulary defining. These changes allow all students to learn the material in a manner that is more suited towards their level and comfortability with the learning.**Extensions:**Extensions will be administered as needed on an individual basis for students that need more time or more of a challenge with the work. Student such as S or A that understand the material more quickly may need more of a challenge and if needed may be asked to try more problems of a similar nature independently to expand their thinking. In addition, the daily challenge for Monday allows students the opportunity to create their own fractions to decompose on the back of the paper for a harder activity if needed.  | Instructional Decisions / Reasoning**Modifications:**These modifications are being implemented to further adapt the lesson to meet the needs of students such as H and M that may need more time and support to complete the lesson. By modifying the requirements to better suit their needs, I am not only catering to their learning levels but applying an appropriate change while allowing them to still complete the lesson. In addition, any additional modifications necessary may be made where needed on an individual basis.**Accommodations:**The accommodations being made for students such as I and W are centered around using more engaging and visual aids to support student learning. While some students may be auditory learners, others in the math class learn best through visuals and doing the work which is why these changes are being implemented. In addition, any accommodations necessary for other needs including special requirements or personal needs may be made as needed.**Differentiation:**The lesson is differentiated to meet the different learning needs of each student. By using the daily challenges and the pre-assessment, I am able to gauge which students need to move at what pace. In addition, the difference in instruction will be based upon group needs as well as individual needs for concerns such as language or comprehension, differentiating the lesson even more as needed. **Extensions:**The additional portions of this lesson will be administered on an individual basis, dependent on what is needed for each student. Those who require more practice and time may be allotted that, while those that may need more of a challenge will be given the opportunity to further their understanding as necessary on a case by case basis.  |

Field Courses Only – Post lesson

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| ReflectionWhen reflecting upon the lesson, I found that the majority of my students are understanding the information based on their answers to the assignment. I separated the student’s work into three sections. Understands, partially understands and dos not understand. This grouping was determined by their correct answers and the work they showed. If students had little work along with incorrect answers, thy did not understand the material. If they had correct answers but little or inaccurate work, thy partially understood the material. If they had correct answers with proper work, they understood the material.When reviewing the work I found that:9 out of 17 students understood the work6 out of 17 students partially understood the work2 out of 17 students did not understand the work.This information shows me that the majority of the students in the class will be ready to progress onto the next part of the lesson which is adding fractions, but support will be needed for most. Th lesson allowed for extended support for those that needed it, though there were a few students that I would’ve pulled for added support that didn’t join me after the mini lesson. In my time walking around the room, I found that I was able to better support the student’s needs but also, in future lessons it’s better to give more examples and clearer expectations, as there was some confusion around the requirements. Overall, I feel like this was a good introduction for what to expect for the future lessons and am comfortable with moving forward with the class.  |

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| Teaching Standards and Rationale**Standard # 1 Learner Development.**I feel I am meeting this standard by creating lessons that take into account every student’s needs and learning styles and creating a lesson that caters to those differences. By adapting and modifying the lesson to suit all the student’s needs I am developing a lesson that meets all my learners in a unique and individual way. **Standard #2 Learning Differences**This standard is met through the understanding of my ELL student language differences, and further challenging them to learn the same material as the rest of the class in an engaging and appropriate manner. By addressing their learning and language differences, I am adjusting my lesson to meet the various needs that are present in the class. **Standard #3 Learning Environments**By giving students the opportunity to work both in small groups and independently, they are more self-directed in their learning and are able to better guide themselves in the math learning as needed. This environment allows for more direct learning and a more student-centered math class.**Standard #4 Content Knowledge**I address this standard by drawing on past knowledge the students have with fractions to address the new unit. In addition, by incorporating the information students are completing on their daily worksheets, I am drawing upon the content knowledge for math class that day and allowing for more practice and engagement with the material.**Standard #6 Assessment**I meet this standard through the various assessments being implemented in this lesson. Both the pre-assessment and formative assessments act as different ways to check for student understanding as well as review the work they’re doing to further affect future instruction. The assessments being done are engaging for the students as well as informative for myself which allow for growth in the material for both sides.**Standard #7 Planning for Instruction**This standard is met through the creation of this lesson plan. By implementing a lesson that is designed to teach students new information through a variety of instructional strategies, I am able to plan my work to be more student focused and collaborative in reaching a similar goal while still meeting all my student’s needs. **Standard #9 Reflection and Continuous Growth**This standard is being met through the multiple points in which students have the chance to reflect throughout the lesson on their learning. In both the daily challenge as well as the exit ticket, students are being tasked with reflecting on their prior and current levels of understanding to either answer questions or explain their comprehension level. These implementations are evidence of continuous and ongoing growth and learning amongst each of my students.  |