**I can represent numerals using ten frames**

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| **Lesson Plan Title**  I can represent numerals using ten frames |
| **Lesson Summary**  Through a guided lesson students will be introduced to the concept of tens and ones. |
| **Curriculum Outcomes**  N04-Students will be expected to represent and partition numbers to 100  Performance Indicator N04.01-Represent a given number using concrete materials, such as base-ten materials  N07-Students will be expected to illustrate, concretely and pictorially, the meaning of place value for numbers to 100 |
| **Assessment Of Learning or Assessment For Learning**  Observation, Conversation, Product  Observations   * Can students use ten frames to show a numeral consists of tens and ones?   Product   * Anecdotal evidence record what students do on their white boards   <http://jkeithgrade2mathns.weebly.com/uploads/2/5/6/7/25673231/anecdotal_records.pdf> |
| **Communication/Vocabulary**   * Ones * Tens * Place Value * Manipulatives * T-chart |
| **Technology**   * I can represent numbers using tens and ones Key Note Presentation I can represent numerals using a ten frames   http://jkeithgrade2mathns.weebly.com/place-value.html   * Virtual Manipulatives for the computer   <http://www.glencoe.com/sites/common_assets/mathematics/ebook_assets/vmf/VMF-Interface.html>   * iPad with K-2 Math Tools App |
| **Materials**   * Ten Frames * Counters * T-chart * White Board/ White Board Markers   \*For Math Manipulative Storage Please See:  <http://jkeithgrade2mathns.weebly.com/math-manipulatives.html> |
| **Mental Mathematics**  Number of the Day Activities from the hundreds chart  Representing the number of the day from the hundreds chart on white boards using ten frames  Review adding and subtracting strategies to 18, or using 0 |
| **Development**  This lesson provides students with the opportunity to explore numbers more deeply and form connections with numbers.  **Time to Teach**  Activate knowledge by asking students to start at 50 and count forward to 90 by 10’s. Then ask them to start at 30 and count forward by 10’s to 100. Have them start at 70 and count backwards to 40 by 10’s. Have them start at 52 and count forward by 1s to 78. Have them start at 33 and count backwards by 1s to 17. Do this until you feel the majority of the class is feeling comfortable and confident.  Then point to the unit cubes and rods you have on the math wall. Ask the students what each represents as a reminder. Then put the number 44 on the board. Explain to students that they are going to use counters (or other manipulatives) to represent the number 44 using tens and ones.  Then explain to the students they will be representing a number using ten frames, and they will be using the t-chart to chart how many tens and ones are represented using their ten frames.  **Time to Practice**  Hand out ten frames  Hand out containers of counters  Tell students they will be representing the number 43 using ten frames  Some students may choose to use white boards as you will be making anecdotal notes of their work  **Time to Share**  Have students share their work and their thoughts about the number 43, and how many groups of ten there are and how many groups of 1 there are. Then ask students to share how they discovered this. When students are done sharing share with them the Key Note Presentation I can represent numerals using ten frames <http://jkeithgrade2mathns.weebly.com/place-value.html> |
| **Differentiation**   * Struggling students may require a guided math group or a smaller number * Students who require enrichment may be asked to use a number expression to represent their number in tens and ones |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| Tens | Ones |
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**Ten Frames**

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**Anecdotal Record Observations**

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| **4** | **Student understands that there are 4 tens and 3 ones in the number 43. Have demonstrated this and can explain how they know.** |
| **3** | **Student understands there are 4 tens and 3 ones in the number 43. Struggle to explain how they know.** |
| **2** | **Student may understand that tens are groups of ten and ones are groups of one, but cannot explain how many tens and ones are in 43.** |
| **1** | **Student shows limited understanding of tens and ones** |

**If you notice:**

**-A student has a 4 enrichment may be required**

**-A student has a 3 may require a guided math group to help them learn how to explain their thinking**

**-A student is a 2 a guided math group is required to help students learn how to connect their knowledge of tens and ones to numbers**

**-A student is a 1 they need more practice working with numbers from 0-10 to help form understandings of numbers.**