

Mathematics Lesson Plan

Name:	Chelsea Keenan
Name of Lesson:	Sharing 月饼 Mooncakes and Math
Grade Level/classroom description:	High school All grade levels, moderate-severe special education classroom

<p>Pre-Requisite Skills/ Understandings: (2-3 sentences on what knowledge this lesson builds on)</p>	<p>Addition Division with remainders Presenting information Presenting evidence to support their ideas</p>
---	--

2. Rationale and General Lesson Plan Description	
<p>General Description of the Lesson: (in a few sentences, what does this lesson do? Why are you choosing to do it like that - on what theories, examples, or research does this lesson draw?)</p>	<p>Students decide in which room to do the presentation. They use addition and division to determine the number of chairs needed and how many chairs needed at each table. If there any extras, student will need to decide what to do with those. I am choosing to do this lesson this way because it is important to “link mathematical learning objectives to everyday events” (Van de Walle, 137). Planning seating arrangements for a group can be used in any number of contexts.</p>
Total Time: 50 min	

3. Curriculum Standards Addressed in your Lesson Plan	
<p>Common Core Standards:</p>	<p>Include all text, not just number of the standard. CCSS.MATH.CONTENT.4.NBT.B.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm</p> <p>CCSS.MATH.CONTENT.4.NBT.B.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>
<p>Common Core Mathematical Practices you will be working on in this lesson (specify at least 2):</p> <ul style="list-style-type: none"> - Model with mathematics. - Construct viable arguments and critique the reasoning of others. 	

4. Student Learning Objectives and Assessment.
<p>Two or three objectives must be written for this lesson: <i>one or two</i> for content and <i>one</i> for language. Then specify how each objective will be assessed within the lesson. Be as specific as possible – for example, if you “will observe students,” what will you be looking for?</p>

Mathematics Lesson Plan

<p>Content Objective 1: Students work together to determine the total number of people, which room to present in, and how to arrange the people in that room.</p>	<p>Assessment: During whole group discussion ask questions to determine their method and thinking for accomplishing these tasks. Work sample-review students' work modeled on the Planning Worksheet.</p>												
<p>Content Objective 2: Students present their plan to the class and state evidence for why, based on the math, it is the best plan.</p>	<p>Assessment: During whole group discussion ask questions to have students explain their thinking. Review student Group Discuss Worksheets.</p>												
<p>Language Objective: I think _____ because _____.</p>	<p>Assessment: Encourage each student to use the statement when presenting their plan. Have para-educators work with students to create the statement in AAC devices or using ASL.</p>												
<p>Some Possible Assessment Tools</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Writing Samples</td> <td style="width: 50%;">Projects</td> </tr> <tr> <td>Demonstrations</td> <td>Rubrics</td> </tr> <tr> <td>Observations</td> <td>Journals</td> </tr> <tr> <td>Portfolios</td> <td>Teacher-made test</td> </tr> <tr> <td>Surveys</td> <td>Other: _____</td> </tr> <tr> <td>Interviews</td> <td></td> </tr> </table>	Writing Samples	Projects	Demonstrations	Rubrics	Observations	Journals	Portfolios	Teacher-made test	Surveys	Other: _____	Interviews	
Writing Samples	Projects												
Demonstrations	Rubrics												
Observations	Journals												
Portfolios	Teacher-made test												
Surveys	Other: _____												
Interviews													

7. Adaptations (ELL, child that presents instructional challenge, gifted): How will you address the needs of particular students in your classroom who may require accommodations? Describe in a few sentences below. *Use resources from class to plan accommodations for EL students and students with learning differences, and be as specific as possible*

Most students in this class are multilingual as well as having multiple disabilities; intellectual disabilities and/or language process challenges.. I will also be intentional when making the groupings. I will put para-educators in groups where they share a language with one or more of the students and partner students in groups to support each other linguistically. Students are invited to write or draw their seating arrangement so that it is access for those still learning to write. By making this a group assignment, students can work together contributing their various skills to solving the problem. Those with less control of their limbs can contribute by sharing their ideas with a group member.

8. Community/Home Connections: How does your lesson connect with students' ways of knowing outside of school? If applicable, in what other ways is your lesson culturally responsive? Describe in a few sentences below.

Some students attend community center clubs where they need to arrange a room for a group of people in a way so that all the members are able to do a given activity. Students can use planning skills not only for places to sit, but also for doing other planning tasks such as setting a table for dinner and adjusting for a guest. This is a chore that many of my students do each night. Some of the students have told me that they sit at a table on the floor to eat their meals and to watch TV. I wanted this to be an option as well for planning the seating arrangement for the presentation as this might be the more obvious solution. For these students, sitting on the floor is their cultural experience, therefore to them it may not be as relevant to determine the number of chairs needed.

Mathematics Lesson Plan

Lesson Flow for [LESSON NAME]		
Times Materials	Activity/Description <i>Insert extra rows as needed</i>	Considerations/Teaching Notes
Task card 5 min.	Launch/Hook: Review pervious 月饼 Mooncakes and Math task and get students excited about sharing what they know and learn about mooncakes with other students.	Student groupings: be intentional-para-educator and other students to student the linguist and communication needs of students. Put below checklist on the board to help keep para-educators and students on task.
Planning Worksheet Whole Group Discussion Worksheet 35 min	<p>Step 1: Determine the total number of people.</p> <p>Step 2: Decide in which classroom to present.</p> <p>Step 3: Using chairs, tables or sitting on the floor? Decide the arrangement.</p> <p>Step 4: Prepare for whole group discussion: -What is your group’s plan? -How did your group do the math? -Why do you think it is a good plan? -What about your math makes your plan a good idea?</p>	Facilitate student discussion by asking questions to help them clarify their thinking about each step and the decisions they are making. Observe, compliant students on their thinking and ask them to share their ideas during group discussion. Have para-educators help organize students’ thoughts before they discuss in whole group.
15 min.	Closing: Whole Group Discussion	Write “I think ____ because ____.” On the board as a reference. Ask questions to draw out thinking. Make connections between strategies students used when doing the math. Have students vote after hearing all plans.