

# CASE: 3<sup>rd</sup> Observation

## General Education Lesson Plan

(http://app.education.pitt.edu/teacherprep)

At your school site you will use this form to plan your lessons. You will send it to your supervisor 24 hours in advance of a pre-scheduled observation and he/she will offer feedback. Use the *glossary* to help you think through your lesson planning.

**Name: Brianna Amoscato**  
**Obs. #: 3**

**Date: November 3, 2014**

**Subject: Rectangular Arrays**

**Supervisor:**

**Things to do to prepare for the lesson:** (What materials will you need? What examples will you need to have prepared? What visuals (i.e. charts, diagrams, organizers, etc.) will you need to prepare ahead of time? What “homework” will you need to do to make certain you really know the material you are about to teach? What will you need to have prepared if you are using an ELMO? If you are using websites, do you need to bookmark them ahead of time?) List all of these things below to remind yourself.

<input type="checkbox"/> Shape Riddle (scanned copy)	<input type="checkbox"/> Virtual Dice and Grid (smart board)	<input type="checkbox"/> Baking Exit Slip
<input type="checkbox"/> Smart Board shape review slides.	<input type="checkbox"/> Rectangular Arrays (2 each)	<input type="checkbox"/> Plastic bags with names, manipulatives and grids.
<input type="checkbox"/> Pablo Picasso Math Project Papers	<input type="checkbox"/> Rectangular Array problem	<input type="checkbox"/>

**Learning goal(s):** (Remember: These are not tasks but statements that will guide your planning for learning. Ask yourself, “What do I want children to learn? How does this goal help me understand what I need to teach and what tasks do I want to design to extend this learning?” The focus is on the **learning**.)

- ✓ All four sided shapes are called quadrilaterals (learning goal review)
- ✓ A polygon is a shape with sides that is closed.
- ✓ An array is a grid with rows and columns
- ✓ You can figure out how many square are in a rectangle by counting the number of rows and objects in each rows
- ✓ 2x3 is really 2 groups of three objects each

**State Standards for the lesson:** (Use <http://www.pdesas.org> to help you with this). This is a PA Department of Education website designed to align with National Core Standards.

Times estimates to help with pacing)	<b>Detailed description and purpose of task(s)</b> (what are you doing and why; prepare some questions and possible responses for discussions)	Cautions & Notes (things you need to keep in mind)	Supervisor Feedback
<b>Structure</b> (grouping, behavior)			

expectations)			
<p>large group at the carpet</p>	<p><b>Lesson Beginning:</b>  <b>Introduction and Review (15 minutes)</b></p> <p><b>Activity One:</b></p> <ul style="list-style-type: none"> <li>✓ The teacher will display the calendar on the board and ask a student to come up and say the date for the class. (Ex: Today is Monday, November 3, 2014.) Have the students begin another pattern (using the small clipart provided) for this new month.</li> <li>✓ Ask students a question related to the calendar that allows them to use their math strategies.            Question: As I looked up the interesting and special days in November, I came across one that I thought was pretty interesting. November 16<sup>th</sup> is considered “have a party with your teddy bear day” If today is the 3<sup>rd</sup>, how many more days do we have until we can have a party with out Teddy Bear? Call students up to the board to point to the calendar spaces and use different strategies (counting by 10’s, counting by 2’s, etc.)</li> <li>✓ Ask students whether or not “Have a Party with Your Teddy Bear Day” falls on an even number or an odd number. Have students practice identifying even or odd number by first finding the double of that number. If it makes two equal groups, it is even. If it does not make two equal groups, it is odd.</li> </ul>	<p>Make sure to call on a student who has NOT yet had the chance to say the date in front of the class. Remind students to use their power voices.</p>	

	<p><b>Review:</b></p> <ul style="list-style-type: none"> <li>✓ The teacher will introduce the geometry “riddle of the day.” The student who created the riddle will stand at the smart board to present it to his or her peers. One or two students will have the opportunity to share their riddle.</li> <li>✓ If necessary, ask students to complete the “geometry table” smart board activity.</li> </ul>		
	<p><i>Lesson Middle (30 minutes)</i></p>		
<p>Students will complete the assessment quietly at their desks.</p>	<p>Activity 1: (5-8 minutes)  The teacher will explain to the students that they will be completing a very short “geometry checkpoint” before we begin our next exciting activity of the day. This is just to make sure that I know I have done a good job explaining the geometry concepts we have learned thus far.” <b>Transition students back to their desks. Tell them that once</b></p>	<p>Teacher should be walking around to make sure everyone is completing the checkpoint to the best of their</p>	

***they get their paper, they may move anywhere around the room to take the assessment. However, they must be spread apart from each other. Remind students this is an independent work activity. Have paper passers meet you at the front of the classroom.*** Explain to the students that, after they are done, they should work in their math folders quietly until everyone has completed the quick assessment. ***Once everyone has completed the task, transition students back to the carpet.***

ability.

Activity 2: Introduce the new concept of the day:  
Arrays (10 minutes)

**Teacher:** *We are going to be starting a new investigation today that has us working with geometry and arrays. An array is really an object that is made up of rows and columns.*

Teacher: From social studies, does anybody know what we call this whole sheet with many rows and columns made up of squares? **Answer:** *A grid.* That grid has many rows and columns.

**Introduce**

- Can someone come up to the board and point to a column (remember what we use in the classroom to help us remember the column?)
- Can someone come up to the board and slide your finger across the first row of our grid?

**Make sure student have grasped the concept of column and row before moving on!**

**Teacher:** *So, I forgot to tell you all of this, but I actually made a pan of brownies (flip the smart board page to the grid with the brownies.) We are going to be baking a lot today in class! I need some help figuring out how many brownies I have.*

- **Connect rows to the number of squares in each row.** Highlight a rectangle that is 3 rows with 2 squares or brownies in each row.

Alaina ate this many brownies for breakfast.

Ask the following questions:

1. How many rows of brownies are there? (Call someone up to the board to count)
2. How many brownies are in each row? (Call someone up to the board to count)
3. What is the total number of brownies? (Call on different students to give you different strategies they used!)

Dice and Brownie review activity:  
Dice: Have one student come up to the board and roll one dice (number of rows) and another dice (number in each row) Highlight the array. Then, have students count how many brownies *in all* using different strategies.

**Activity 3: Application 20 minutes**  
***Introduce the “Brownie Problem”***

1. Ms. Amoscato baked a lot of brownies for her class. However, little did she know that Ms. Inglis and Mrs. Jacob also baked brownies for 2C..Naturally, Ms. Inglis thinks that she has made the biggest pan of brownies. Personally, I think she is wrong. However, it is up to you to figure this dilemma out!
  2. Teacher: What do you notice about the pans of brownies I am holding up? Answer: They do not have any squares! Exactly! I did not tell you how many brownies are in each pan. That would be too easy! Your job is going to be to use the square manipulative to determine how many squares fit on each pan. Then, you and your partner are going to record the number of rows. The number of brownies in each row and the total number of brownies on your baking recording sheet.
- ✓ *Each student will get one pan of Ms. Amoscato’s brownies, one pan of Mrs. Jacob’s brownies and one pan of Ms. Inglis’ brownies. In addition, each student will receive a recording sheet to record the number of rows and total number of brownies.*

Make sure to have partners already determined to save time. Partners should be of similar ability level. This way, both are working together and not just one individual is doing all of the work.

student will complete application problem somewhere on the floor around the room with their partner.

<i>Conclusion (5 minutes)</i>	<ul style="list-style-type: none"><li>✓ <i>Baking exit slip: (This is their ticket to line up for their special)</i></li><li>✓ <i>Each slip will have a grid of brownies. Students will identify the number of rows. The number of brownies in each row and the total number of brownies.</i></li></ul>		
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