

Lesson Plan Template

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BETHANY
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Time allotted: _____ minutes

Subject: Math Grade level: 3rd

Topic / Title: 4.8 Multiplication Arrays

Course **EDUC 320**

Approved by Cooperating Teacher: _____

Portfolio # _____

A. Standards; objectives / requisite skills / learner outcomes “At the completion of this lesson, learners will be able to ...” (Use observable / measurable terms + strong verbs.)

Standard(s):

Cognitive objective(s): After the lesson, students will be able to draw arrays based off of information from a word problem, then write a multiplication problem from the array.

Affective objective(s): During the lesson, students will practice drawing arrays numerous times and because of this will reinforce their knowledge on arrays.

Psychomotor objective(s): During the lesson, students will move from desk to desk to find the next word problem. They will then write the equation from the array on their worksheet.

B. Assessment plan: How will you know that the learners met the objectives? What will you be able to observe and measure? What percentage of the class will be meeting your objectives? Incorporate this plan into the Input section of the lesson. I will ask students questions throughout the lesson and they will give me verbal feedback. Then I will give the students a series of problems that allow them to draw arrays and write a multiplication equation.

C. Multiple intelligences: Select one primary (p) and one secondary (s)

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|-----------------------------|------------------------|----------------------|
| <u>P</u> verbal linguistic | _____ musical/rhythmic | _____ visual/spatial |
| _____ logical/mathematical | _____ interpersonal | _____ intrapersonal |
| <u>S</u> bodily/kinesthetic | _____ naturalistic | |

D. Accommodations & differentiation for learners: Includes all students with emphasis on ELL/ESL/LEP, LD, highly capable, etc. How will knowledge of your students inform your planning, instruction, and assessment?

E. Materials / equipment needed:

Teacher: Equation cards

F. Academic language demands

Vocabulary: Array, fact family

Students: Worksheets, white board, marker, pencil	Function (verb): Literacy strategy (ELA only):
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G. Academic language support: How will the teacher model and the students engage with the language demands?
The class has worked with these before, so I will begin the lesson with review. I will ask the class what an array is. Then I will give them the multiplication problem $3 \times 6 = 18$ and ask the class to draw an array on their white board. I will ask the students which parts of the arrays are rows and which are columns. Then I will ask the students how I complete the fact family for $3 \times 6 = 18$ and write them on the board.

<p>I. Assumptions: What prior knowledge do students hold and how will prior knowledge be activated? What prerequisite skills have learners mastered? Students will remember how to make an array and its components.</p>	<p>J. Anticipated questions & misunderstandings: What common misunderstandings or errors may occur? What pre-assessment is used? Students may be confused on how to make an array based off of a word problem.</p>
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L. Technology: What, if any, use of instructional tech. are involved during instruction, learning tasks, and/or assessment?
None

<p>Pacing / Time Allotted</p>	<p><i>Detailed planning: Write plans to a level of depth that would allow another teacher to use the plan to deliver the instruction. Script the learning target(s), transitions, conclusion, and key questions.</i></p> <p>M. Lesson planning of instructional activities & learning tasks:</p> <p>1. Anticipatory Set: (set induction / introduction / focusing event / activating prior knowledge)</p> <p style="padding-left: 40px;">Statement of Objective (scripted): Today we will be reading word problems and drawing arrays. Then we will be turning the array into a multiplication equation and making its fact family.</p> <p style="padding-left: 40px;"><i>Transition: Let's start by reviewing arrays.</i></p> <p>2. Input: Outline of presentation – steps / strategies / modeling (means of instruction, learning tasks, active engagement) <i>Include what teacher will do & what students will do. Script key questions.</i></p> <p style="padding-left: 40px;">A. Write the multiplication problem 3×6 on the board. Label the 3 rows and the 6 columns. Then ask the class how I would draw the array.</p> <p style="padding-left: 40px;">B. Then ask the class how they would complete the fact family for 3×6.</p>
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C. Have the class practice drawing arrays on their white boards by using the problems: 2×5 , 4×4 , 7×3 , 9×8 . After the students complete the array, have them hold their boards up so that I (the teacher) can evaluate their work.

D. After each array that is drawn, have the students erase their boards and write the fact family. Then have the students hold their boards up.

Transition: Let's look at some arrays in word problems.

3. Guided Practice:

- Complete the last 4 cards of the activity.
- Have the students use their white boards to write the initial multiplication problem given, then draw the array. The students will hold their white boards up after writing the equation and drawing the array.
- Then distribute one card on every desk.
- The students will draw an array based of the equation given to them.
- Then they will move to the next desk with the next card on it to complete the next word problem.

4. Evidence of Learning: *How will you know when the learners have reached the objectives? What type of feedback is provided? How is assessment aligned with the objectives / skills? Will students be involved in assessment / reflection upon their own learning?*

I will walk around the room and watch the students drawing the arrays and equations. I will also hear verbal feedback during the lesson via questions and answers.

Transition: When you are finished, you may hand in your worksheet and start on your math journal.

5. Closure & Independent Practice: (transfer of learning / assignment) *How does the assignment support mastery of the objectives / skills? How will the assignment be evaluated?*

The worksheet gives them more opportunities to see word problems and interpret them into arrays and equations.

<p>Closing Statement (scripted): You have all really mastered arrays. Because of this you should be able to draw out any multiplication or division problem!</p>

N. Evaluation & reflection of teaching / learning: *Respond with thoughtful, professional insights that go beyond superficial considerations. For example, consider whether and how you know that students reached the learning targets, what strategies might have led to improved instruction, whether assessments provided useful data, and the extent to which the whole class, individuals, and subgroups achieved the objectives. How did I teach? What did I learn about my teaching? What specifically do I need to work on for improvement? What missed opportunities for learning can I identify? What is to be taught next? How will data from the assessment guide future instruction?*

- 1. As I reflect on the lesson, to what extent were students productively engaged?**
- 2. To what extent did the students learn what I intended? Were instructional objectives met?**
- 3. To what extent did I alter my objectives or instructional plan as I taught the lesson? Why?**
- 4. To what extent did I practice effective classroom management strategies? What issues do I need to address when I teach again?**
- 5. To what extent did I provide closure to the lesson?**
- 6. If I had the opportunity to teach this lesson again to the same group of students, what would I do differently? Why? How would this affect the outcome of this and future instruction?**