

Lesson Plan

Learning Segment Focus: Properties of Operations Lesson: 1 of 4

Course & topic addressed: Math, Expressions and Equations Date: 02/04/2020 Grade: 6th

Student Outcomes

Specific learning objectives for this lesson.	Students will learn how to write equivalent equations using the different properties of operations.
Justify how learning tasks are appropriate using examples of students' prior academic learning .	Students will learn that the operations they have learned in the past will help in forming equivalent equations out of the same equation.
Justify how learning tasks are appropriate using examples of students' personal, cultural, linguistic, or community assets .	All classrooms have a variety of races, there are white, black, hispanic, Asian, and many others. The task presented is not out of reach for any student. There will be resources available for those students that are not English first students.

State Academic Content Standards

List the state academic content standards with which this lesson is aligned. Include abbreviation, number & text of the standard(s).	AR.Math.Content.6.EE.A.3: Apply the properties of operations to generate equivalent expressions
---	--

Key Vocabulary

What vocabulary terms/content specific terminology must be addressed for students to master the content?	Commutative property, Associative property, Distributive property, Density property, Identity property
---	---

Academic Language Support

<p>What are the Academic Language Function(s) (the content and language focus of the learning task represented by the active verbs within the learning objectives/outcomes) and explain how they are utilized in the lesson plan?</p> <p>What planned Academic Language Supports will you use to assist students in their understanding of key academic language to express and develop their content learning and to provide varying supports for students at different levels of Academic Language development? How do these supports address all three Academic Language Demands (vocabulary, syntax, and discourse)?</p>	<p>Students will be able to explain the different properties of operations in math and be able to justify their answers to equations that they work out.</p> <p>I will be using the inspiration presentation to present definitions to the students and giving them examples for them to direct themselves to evaluate themselves on the worksheet. I will also be using groups as another language support.</p> <p>The inspiration presentation will give them the resources they need to cover the vocabulary portion of the lesson. The presentation will also give them a form of organization to cover syntax. The group work will address the discourse portion of demands.</p>
---	---

Materials

Materials needed by teacher for this lesson. (such as books, writing materials, computers, models, colored paper, etc.)	Computer, white board, marker, projector, Example sheet
Materials needed by students for this lesson. (computers, journals, textbook, etc.)	Notebook, pencil, passed out example sheet

Lesson Timeline with Instructional Strategies & Learning Tasks

Amount of Time	Teaching & Learning Activities (This should be a BULLETED LIST)	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson. (This should be VERY DETAILED)
5 Minutes	<p><u>Introduction:</u></p> <ul style="list-style-type: none"> • Refresher activity with the operations of math. 	<p>I will be in front of the class asking what each operation is. I will ask the students to define each one and give an example of each. Students will be grouped up and will have to define one of the operations and give an example.</p>
30 Minutes	<p><u>Instruction:</u></p> <ul style="list-style-type: none"> • Inspiration presentation • Group work 	<p>I will be at the computer and the white board. As I define each vocabulary word, I will work out an example on the board. I will also be filling in the inspiration presentation as we go along. This presentation will also be available for students after class. I will pass out an example sheet to be filled in as we go through each vocabulary word. After I work an example out of each property, there will be a section of problems on the worksheet for them to calculate. Students will be at their groups and filling out their example sheet as I lecture in class. They will be allowed to ask questions within their groups, and if that does not answer their questions they are welcome to ask me for help.</p>
5-7 minutes	<p><u>Closure:</u></p> <ul style="list-style-type: none"> • Closing statements 	<p>I will be at the front of the class going over the definitions one more time and asking students if they have any questions. I will also be passing out a copy of the presentation for the students to keep. Students will ask questions as needed and fill in any blanks that they may have on their own papers.</p>

Accommodations/Modifications

<p>How might I modify instruction for: <i>Remediation?</i> <i>Intervention?</i> <i>IEP/504?</i> <i>LEP/ESL?</i> (All students who have plans mandated by federal and state law.)</p>	<p>During the group work time, I can have computers set up for those students that are having trouble keeping up with me in class. For ESL students I can have a similar lesson set up on the computer using their primary language.</p>
--	--

Differentiation

<p>How might you provide a variety of techniques (enhanced scaffolding, explicit instruction, contextualized materials, highlighters/color coding, etc.) to ensure all student needs are met? (All students who are not on specific plans mandated by federal and state law.)</p>	<p>For those students that are struggling, I can hold after class instruction and offer any assistance that they may need on the topic. On the presentation, there are different colors used as well to separate the definitions and the examples.</p>
--	--

Assessments: Formative and/or Summative

<p>Describe the tools/procedures that will be used in this lesson to monitor students' learning of the lesson objective(s) (include type of assessment & what is assessed).</p>	<p><input checked="" type="checkbox"/> Formative / <input type="checkbox"/> Summative</p>	<p>Students working out the worksheet</p>
	<p><input checked="" type="checkbox"/> Formative / <input type="checkbox"/> Summative</p>	<p>Asking students to define the operations and give examples of each.</p>
	<p><input type="checkbox"/> Formative / <input type="checkbox"/> Summative</p>	

Research/Theory

<p>Explain connections to theories and/or research (as well as experts in the field or national organization positions) that support the approach you chose and justify your choices using principles of the connected theories and/or research.</p>	<p>Cognitivism s a learning theory developed by Jean Piaget in which a child develops cognitive pathways in understanding and physical response to experiences. This theory suggests that students learn most effectively from reading text and lecture instruction.</p>
--	--

Lesson Reflection/Evaluation

<p>What went well? What changes should be made? How will I use assessment data for next steps?</p>	<p><i>TO BE FILLED IN AFTER TEACHING</i></p>
---	--

Include supporting material such as slides, pictures, copy of textbook, and handouts for any activities students will be using as part of your lesson.

*adapted from: <http://webcache.googleusercontent.com/search?q=cache:EsQcNWuG1Zoj:web.mnstate.edu/harms/StudentTeachers/edTPA-LessonPlan.doc+&cd=2&hl=en&ct=clnk&gl=us>; <http://www.moreheadstate.edu/getmedia/cd3fd026-939f-4a47-a938-29c06d74ca01/Lesson-Plan-and-Reflections.aspx>;
<http://www.mcneese.edu/f/c/9cb690d2/Lesson%20Plan%20Rubric%20Aligned%20with%20InTASC.docx> ;<https://www.uwsp.edu/education/Documents/edTPA/Resource12.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/Resource11.pdf>;
<https://www.uwsp.edu/education/Documents/edTPA/Resource11a.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/LessonPlanTemplateSOE.docx>;
<https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanGuide.docx> ;
<https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanTemplate.docx>



Applying properties of operations to generate equivalent equations

