

Name _____ Sydney Sweat _____

Lesson Plan

Learning Segment Focus _____ The distributive property _____ Lesson
 _____ 1 _____ of _____ math _____

Course & topic addressed _____ Math Properties of
 Operations _____ Date _____ 1/29/20 _____ Grade _____ 6 _____

Student Outcomes

Specific learning objectives for this lesson.	Students will be able to solve problems using the distributive property. This will allow them to generate equivalent expressions.
Justify how learning tasks are appropriate using examples of students' prior academic learning .	Students will use their prior knowledge on addition, variables, alike factors, and multiplication.
Justify how learning tasks are appropriate using examples of students' personal, cultural, linguistic, or community assets .	Math is a universal language. No matter where a student is from, math can be done anywhere. As students have different backgrounds, math can still be used to communicate and welcome them into a classroom.

State Academic Content Standards

List the state academic content standards with which this lesson is aligned. Include abbreviation, number & text of the standard(s).	<p>AR.Math.Content.6.EE.A.3 Apply the properties of operations to generate equivalent expressions</p> <p>For example: Apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.</p> <p>Note: Includes but not limited to the distributive property.</p>
---	--

Key Vocabulary

What vocabulary terms/content specific terminology must be addressed for students to master the content?	Parenthesis, Addition, Distribute, Multiplication, Subtraction
---	---

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>The academic language function that I will utilize is the solving problems one. This will be done through using words such as “because” or “this lead to that”. This language function helps justify the answer of something is that because of the process used for solving the problem. Students will use the vocabulary and its definitions to understand the process that the distributive property goes through.</p>
---	--

Materials

Materials needed by teacher for this lesson. (such as books, writing materials, computers, models, colored paper, etc.)	Computers with inspiration 9 Paper Promethean Board markers White Board
Materials needed by students for this lesson. (computers, journals, textbook, etc.)	Computers Pencils Any paper the teacher provides

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)
10	<p>Introduction:</p> <ul style="list-style-type: none"> - The students will get into groups of 3 - A paper with the outline will be given - They will define the vocab on the outline - They will then share their definitions 	<p>I will give each student a paper of the outline as they walk in the door. I will monitor groups to keep them on track.</p> <p>As students share their definitions I will write them on the white board under the word .</p>
40	<p>Instruction:</p> <ul style="list-style-type: none"> - We will work 3 problems that fall under each category as a class. - We will review why each problem is worked the way it is, and why the solution is what it is. - Students will fill in their template on the computer - As we work on the distributive property, I will let them try a problem with a partner, then we will work on it together as a class. 	<p>I will be demonstrating, explaining, and assisting my students throughout this whole process. This will be done on the white board and smartboard also. I will be showing them my template as needed.</p> <p>I will be modeling how to do different problems and as students work on problems I will be observing and giving feedback.</p> <p>My goal for this lesson is for them to understand and be able to do the distributive property on their own when they work on problems given to them.</p>
10	<p>Closure:</p> <ul style="list-style-type: none"> - Have students submit assignments and ask any last minute questions they may still be confused about 	<p>My job is to assist students in last minute questions and make sure everyone turned in their assignment.</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</p>	<p>I will modify my lesson by allowing them to work with a partner, or more time to work on problems. I will also have all instructions said verbally, have written notes and directions, and pictures or examples where necessary.</p>
--	---

federal and state law.)	
-------------------------	--

Differentiation

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.)	Providing visuals and examples to grow understanding will be one technique I use. These examples or visuals will provide clarity where before students didn't know where to start. I will also provide extra assistance where I know a problem or equation was made to be extra challenging. This could be reading them the problem and providing hints to get their brains flowing.
--	--

Assessments: Formative and/or Summative

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).	<input checked="" type="checkbox"/> Formative / <input type="checkbox"/> Summative	I will observe the students as they are in groups. I will observe the ideas they are forming and who is leading the discussion.
	<input checked="" type="checkbox"/> Formative / <input type="checkbox"/> Summative	I will take notes on who is successfully completing the problems with ease and who needs help. I will ask students questions based on what are they struggling with and how might this of been different so they better understand.
	<input type="checkbox"/> Formative / <input checked="" type="checkbox"/> Summative	My summative assessment will come once they turn their papers in. If the student excel, I know that they understood the lesson and we do not need to spend more time on it. If there was a majority or struggle, I know I need to change and review that specific topic.

Research/Theory

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.	Schema and Constructivism by Jean Piaget is the theory that supports my approach. This lesson is really building on previous knowledge that the student knows. This will be done by activities and not just lecture.
---	--

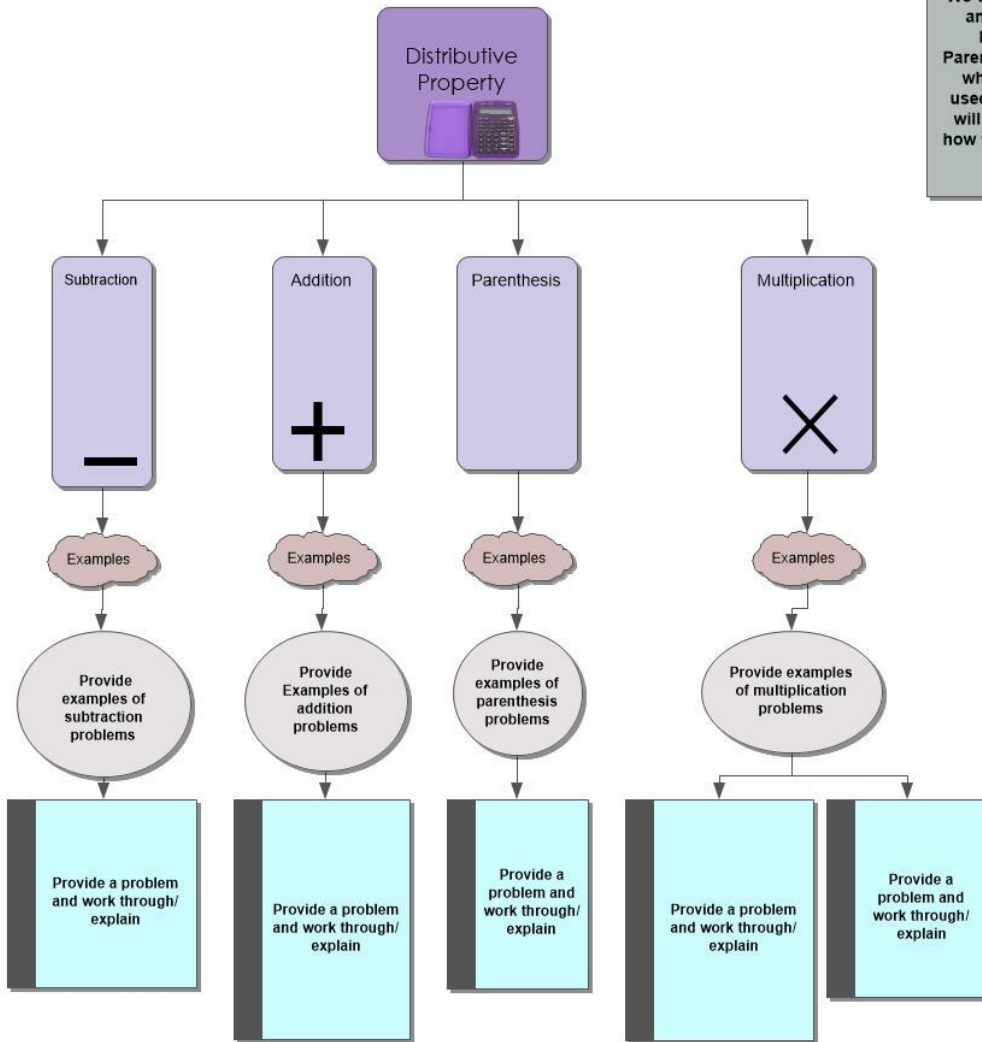
Lesson Reflection/Evaluation

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


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>

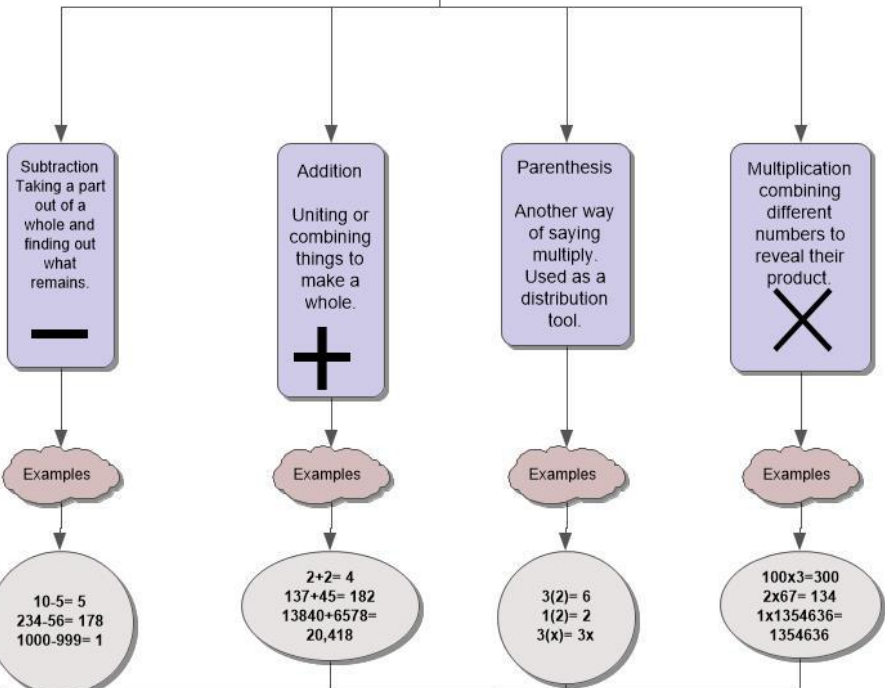
We will explore what the distributive property is, and the parts of math that it involves. In the boxes below write what you know about Parenthesis, Multiplication, and Addition. Include when you have used them and what they are used for. Try the examples on your own and we will go over them in class. We will then go into how to use the distributive property and how you can use it.



Distributive Property
 The distributive property is multiplying each addend separately and then add the products.



We will explore what the distributive property is, and the parts of math that it involves. In the boxes below write what you know about Parenthesis, Multiplication, and Addition. Include when you have used them and what they are used for. Try the examples on your own and we will go over them in class. We will then go into how to use the distributive property and how you can use it.



3(2+x)
 $3 \times 2 = 6$
 You first have to multiply the three and the two. This is distributing the three.
 You then need to distribute the three to the x.
 $3 \text{ times } x = 3x$
 You then must add 6 and $3x$
 $6+3x$ is your answer

10(2-y)
 Distribute the ten with both the two and the y, but keep the subtraction symbol between them. You should get $20-10y$. How it works with addition, it works with subtraction also.

y+y+y
 Because they are all the same properties, they need to be combined. It would simplify into $3y$.

If an x or a z was thrown into an equation the y's and other variables wouldn't be able to combine.
 If you have $y+y+y+x$ the answer would be different. It would be $3y + x$

Why is $24x+18y$ equivalent to $6(4x+3y)$
 The 6 would be distributed to the $4x$ and the $3y$. The $4x$ would change to $24x$ and the $3y$ would change to $18y$. you would then keep the addition sign between them because they are not like variables.