

Lesson Plan Model

Lesson Title: Math/ Multiply and Divide within 100

Grade Level: 3rd Grade

Learning Central Focus

<p>Central Focus What is the central focus for the content in the learning segment?</p>	<ul style="list-style-type: none"> ◆ Students will demonstrate understanding of multiplying and dividing within 100. <ul style="list-style-type: none"> - See standard for example. ◆ Students will understand how to use strategies to compare the relationships between numbers when multiplying and dividing.
<p>Content Standard What standard(s) are most relevant to the learning goals?</p>	<p>AR.Math.Content.3.OA.C.7</p> <ul style="list-style-type: none"> ◆ Using <i>computational fluency</i>, multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations ◆ By the end of Grade 3, automatically (<i>fact fluency</i>) recall all <i>products</i> of two one-digit numbers
<p>Student Learning Goal(s)/ Objective(s) Skills/procedures What are the specific learning goal(s) for student in this lesson? Concepts and reasoning/problem solving/thinking/strategies¹ What are the specific learning goal(s) for students in this lesson?</p>	<ul style="list-style-type: none"> ◆ Students will show multiplication skills from previous lessons. ◆ Students will show division skills from previous lessons. ◆ Multiplication concepts and solving strategies should be known from previous lessons.

¹ The prompt provided here should be modified to reflect subject specific aspects of learning. Language here is mathematics related. See candidate edTPA handbooks for the "Making Good Choices" resource for subject specific components.

	<ul style="list-style-type: none">◆ The goal of this lesson is to get the students to use strategies and think about relationships between numbers to come to the conclusion that $6 \times 5 = 30$; one could conclude that $5 \div 30 = 6$.
<p>Prior Academic Knowledge and Conceptions</p> <p>What knowledge, skills, and concepts must students already know to be successful with this lesson?</p> <p>What prior knowledge and/or gaps in knowledge do these students have that are necessary to support the learning of the skills and concepts for this lesson?</p>	<ul style="list-style-type: none">◆ Students should already know their multiplication and division tables up to 100.◆ Students should be successful if they have the multiplication and division knowledge from previous classes.
<p>Common Errors, Developmental Approximations, Misconceptions, Partial Understandings, or Misunderstandings</p> <p>What are common errors or misunderstandings of students related to the central focus of this lesson?</p> <p>How will you address them for this group of students?</p>	

Instructional Strategies and Learning Tasks

Description of what the teacher (you) will be doing and/or what the students will be doing.

<p>Launch ___5___ Minutes</p> <p>How will you start the lesson to engage and motivate students in learning?</p>	<ul style="list-style-type: none"> ◆ The teacher should start the lesson by having a bell ringer on the board for the students to complete on their own. <p>The goal of this activity is to get the students minds thinking outside of the box.</p> <ul style="list-style-type: none"> - An example of an appropriate bell ringer would be; if $3 \times 8 = 24$ what does $24 \div 3 = ?$ - This bell ringer will help you see what student has a grasp on this math strategy and what student needs help with it. <p>*Make sure you tell the students to keep their bell ringer answer for group discussion.</p> <ul style="list-style-type: none"> ◆ After the students finish their bell ringer, the teacher should then ask for volunteers for group discussion.
<p>Instruction ___20___ Minutes</p> <p>What will you do to engage students in developing understanding of the lesson objective(s)?</p> <p>How will you link the new content (skills and concepts) to students' prior academic learning and their personal/cultural and community assets?</p> <p>What will you say and do? What questions will you ask?</p> <p>How will you engage students to help</p>	<ul style="list-style-type: none"> ◆ The bell ringer should give the teacher an idea as to what each child knows. ◆ Jump into the lesson and start challenging young minds!! ◆ Start with smaller multiplication and division problems and work your way up. <p>- $1 \times 5 = 5; 5 \div 1 = ?$.</p> <ul style="list-style-type: none"> ◆ After you've gone over the basics go further and push those young minds with harder problems. ◆ Ask the students how they know that because 5×5 is 25 that 25 divided by 5 is 5. Make them think and speak out of their comfort zones.

<p>them understand the concepts?</p> <p>What will students do?</p> <p>How will you determine if students are meeting the intended learning objectives?</p>	<ul style="list-style-type: none"> ◆ Get the students up out of their seats and have ‘young teachers’ come to the board and create problems for their peers to answer. Or even have them come up to explain on the white board or chalk board. ◆ By allowing the students to speak openly and challenge each other I will see how the students are understanding the topic and math problems through their answers.
<p>Structured Practice and Application ___10___ Minutes</p> <p>How will you give students the opportunity to practice so you can provide feedback?</p> <p>How will students apply what they have learned?</p> <p>How will you determine if students are meeting the intended learning objectives?</p>	<ul style="list-style-type: none"> ◆ The students will practice during group discussions and show answers on their individual dry erase boards. ◆ They will be required to fill in the Inspiration 9 template that helps lay out each time’s table and division table. ◆ This lesson is packed with open discussion and it allows the students to explain verbally and mentally if they understand the concept or not. ◆ The students should be able to apply their skills in quizzes or exams. ◆ Students will be expected to get up in front of the class to display a problem of their own that they want the class to solve.
<p>Closure ___5___ Minutes</p> <p>How will you end the lesson?</p>	<ul style="list-style-type: none"> ◆ I will close the lesson by having the students sit in the back in their seat and we will play a game. ◆ The game involves paper plates and a sharpie. I will write different problems on the plates and then whoever catches the plate will have to answer the question. They will be easy and hard questions, but each student should have the knowledge to answer the questions.

<p>Differentiation/ Planned Support</p> <p>How will you provide students access to learning based on individual and group needs?</p> <p>How will you support students with gaps in the prior knowledge that is necessary to be successful in this lesson?</p>	<p><i>Whole Class:</i></p> <p><i>Groups of students with similar needs:</i></p> <p><i>Individual students:</i></p> <p><i>Students with IEP's or 504 plans:</i></p> <p><i>Strategies for responding to common errors and misunderstandings, developmental approximations, misconceptions, partial understandings, and/or misunderstandings:</i></p>
<p>Student Interactions</p> <p>How will you structure opportunities for students to work with partners or in groups? What criteria will you use when forming groups?</p>	<ul style="list-style-type: none"> ◆ Students will have many opportunities to interact and conversate with their peers in this activity. When we go over the bell ringer they will have the opportunity to ask questions as to why their peer answered one way instead of another. ◆ Students will also be able to interact in groups when
<p>What Ifs</p> <p>What might not go as planned and how can you be ready to make adjustment?</p>	<ul style="list-style-type: none"> ◆ If the plates do not fly in the air like a frisbee, then maybe you can call on students and hold up a random plate and call on someone randomly.

<p>Theoretical Principles and/or Research-Based Best Practices</p> <p>Why are the learning tasks for this lesson appropriate for your students?</p>	
<p>Materials</p> <p>What materials does the teacher need for this lesson?</p> <p>What materials do the students need for this lesson?</p>	<ul style="list-style-type: none"> ◆ Paper plates ◆ Sharpies ◆ Small dry erase boards ◆ Dry erase markers ◆ Inspiration 9 ◆ Computers/computer lab

Academic Language Demand(s):

<p>What language function do you want students to develop in this lesson? What must students understand in order to be intellectually engaged in the lesson?</p>	
<p>What content specific terms (vocabulary) do students need to support learning of the learning objective for this lesson</p>	
<p>What specific way(s) will students need to use language (reading,</p>	

writing, listening and/or speaking) to participate in learning tasks and demonstrate their learning for this lesson?	
What are your students' abilities with regard to the oral and written language associated with this lesson?	
How will you support students so they can understand and use the language associated with the language function and other demands in meeting the learning objectives of the lesson?	

Assessments:

Describe the tools/procedures that will be used in **this lesson** to monitor students' learning of the lesson objective(s). Attach a copy of the assessment and the evaluation criteria/rubric in the resources section at the end of the lesson plan.

Type of assessment (Informal or Formal)	Description of assessment	Modifications to the assessment so that all students could demonstrate their learning.	Evaluation Criteria - What evidence of student learning (related to the learning objectives and central focus) does the assessment provide?

Analyzing Teaching

To be completed after the lesson has be taught

What worked?	
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What didn't? For whom?	
Adjustments What instructional changes do you need to make as you prepare for the lesson tomorrow?	
Proposed Changes. If you could teach this lesson again to this group of students what changes would you make to your instruction ?	<i>Whole class:</i> <i>Groups of students:</i> <i>Individual students:</i>
Justification Why will these changes improve student learning? What research/theory supports these changes?	

Resources:

Attach each assessment and associated evaluation criteria/rubric.