Instructional Strategies

CLUSTER	OBJECTIVES	TIME
1 *Operating the Sony camcorder*	The learner who volunteered to operate the camera will learn how to hold the camera steady with both hands.	**30 seconds**
1 *Operating the Sony camcorder*	The learner who volunteered to operate the camera will learn which button to press to start recording.	**30 seconds**
1 *Operating the Sony camcorder*	The learner who volunteered to operate the camera will learn which button to press to stop recording.	**30 seconds**
2 *Use the standard algorithm to multiply one digit by three digits*	The learner in charge of teaching how to multiply will create a multiplication equation that multiplies one digit by three digits and will show me how to solve each equation.	**2 minutes**
2 *Use the standard algorithm to multiply one digit by four digits*	The learner in charge of teaching how to multiply will create a multiplication equation that multiplies one digit by four digits and will show me how to solve each equation.	**2 minutes**
3 *Use the standard algorithm to divide up to a four-digit dividend by a one-digit divisor*	The learner in charge of teaching how to do long division without remainders will create a division equation and will show me how to solve the equation.	**2 minutes**

3 *Use the standard algorithm to divide up to a four-digit dividend by a one-digit divisor that includes interpreting remainders*	The learner in charge of teaching how to do long division with remainders will create a division equation and will show me how to solve the equation.	**2 minutes**

PRE-INSTRUCTIONAL ACTIVITIES
Attention – The learners will recall prior facts from their multiplication and division criterion-reference assessment. **Relevance –** The learners will be teaching how to multiply and divide with and without remainders, which builds on TEKS from past grade levels. **Confidence –** These are the learners who were chosen because they showed mastery (at least 90% accuracy) in their district given criterion-reference assessment. **Satisfaction –** Learners will know the videos they produce will help other learners in our math class.
Objectives: Learners will be given an outline of the objectives we need to complete. We will start by first operating the camera and moving on to multiplication and then division. The objectives will be communicated orally.
Entry Skills: Learners will need to know how to multiply, how to divide, and how to divide with remainders. Learners will have shown mastery (at least 90% accuracy) in their criterion reference assessment. The learner who volunteered to hold the camcorder volunteered because a familiarity had already been established with the learner and the use of a

camcorder.

Student Groupings and Media Selection: Small grouping consisting of the "Pink Group" learners in my advanced math class. Media will include technology use via a camcorder and markers to write on a whiteboard.

ASSESSMENT

Pretest: At least 90% accuracy on the district given criterion-reference assessment.

Practice Tests: No practice test will be administered, but the learners will practice generating and solving multiplication and division equations, as well as how to operate a Sony handheld camcorder.

Posttest: The learners will create a working instructional mathematical video that explains how to multiply one digit by up to four digits, and how to do long division with and without remainders.

Student Groupings and Media Selection: Small group of 4 learners with the use of a Sony handheld camcorder, markers, and a whiteboard.

FOLLOW-THROUGH ACTIVITIES

Memory Aids: The learners will practice and reference their math workbook, Buddy Scholar, and Vocabulary Challenge.

Transfer: The learners will be able to transfer their knowledge in multiplication and division by creating a tutorial video on how to multiply across three and four digits, and how to divide with and without remainders.

Student Groupings and Media Selection: Learners in my Pink Group will use their practice math workbooks as well as their words from the Vocabulary Challenge.

Objective 1: The learner will Hold the Sony camcorder steady.

CONTENT PRESENTATION
Content: Demonstrate to learner how to hold camcorder with both hands.
Examples: Say “hold the camcorder steady with both hands, one hand on each side of the camera.”
Student Groupings and Media Selections: Single learner who volunteered to hold the camera using the Sony handheld camcorder.
STUDENT PARTICIPATION
Practice Items and Activities: The learners will hold the camcorder independently.
Feedback: The learners will receive feedback from me.
Student Groupings and Media Selections: Single learner who volunteered to hold the camera will be using a Sony handheld camcorder.

Objective 2: Record a video by pressing the red button.
CONTENT PRESENTATION
Content: The learner will be able to start recording a video by pressing the red button.
Examples: Say “press this red button.”
Student Groupings and Media Selections: Learner who volunteered to operate the camcorder will be using the Sony handheld camcorder and identify the red button.
STUDENT PARTICIPATION
Practice Items and Activities: The learners will be pressing the red button on the camcorder.

Feedback: Feedback will be given by me.
Student Groupings and Media Selections: Single learner who volunteered to hold the camera will be using a Sony handheld camcorder.

Objective 3: Stop recording a video by pressing the red button again.
CONTENT PRESENTATION
Content: The learner will be able to start recording a video by pressing the red button.
Examples: Say “press the red button again to stop recording.”
Student Groupings and Media Selections: Learner who volunteered to operate the camcorder will be using the Sony handheld camcorder and press the red button again.
STUDENT PARTICIPATION
Practice Items and Activities: The learners will be pressing the red button on the camcorder.
Feedback: Feedback will be given by me.
Student Groupings and Media Selections: Learner who volunteered to operate the camcorder will be using the Sony handheld camcorder.

Objective 4: Use the standard algorithm to multiply one digit by three digits.
CONTENT PRESENTATION

Content: The learner will multiply one digit by three digits on the whiteboard.
Examples: 4 x 321
Student Groupings and Media Selections: The learner who showed mastery by achieving at least 90% proficiency on the district given multiplication criterion-reference assessment will use markers and a whiteboard to demonstrate how to multiply one digit by three digits.
STUDENT PARTICIPATION
Practice Items and Activities: The learner will be multiplying one digit by three digits.
Feedback: Feedback will be given by me.
Student Groupings and Media Selections: The learner who showed mastery by achieving at least 90% proficiency on the district given multiplication criterion-reference assessment will use markers and a whiteboard to demonstrate how to multiply one digit by three digits.

Objective 5: Use the standard algorithm to multiply one digit by four digits.
CONTENT PRESENTATION
Content: The learner will multiply one digit by four digits on the whiteboard.
Examples: 2 x 6,234
Student Groupings and Media Selections: The learner who showed mastery by achieving at least 90% proficiency on the district given multiplication criterion-reference assessment will use markers and a whiteboard to demonstrate how to multiply one digit by four digits.
STUDENT PARTICIPATION
Practice Items and Activities: The learner will be multiplying one digit by four digits.

Feedback: Feedback will be given by me.
Student Groupings and Media Selections: The learner who showed mastery by achieving at least 90% proficiency on the district given multiplication criterion-reference assessment will use markers and a whiteboard to demonstrate how to multiply one digit by four digits.

Objective 6: Use the standard algorithm to divide up to a four-digit dividend by a one-digit divisor.
CONTENT PRESENTATION
Content: The learner will divide up to a four-digit dividend by a one-digit divisor.
Examples: 250 ÷ 5
Student Groupings and Media Selections: The learner who showed mastery by achieving at least 90% proficiency on the district given division criterion-reference assessment will use markers and a whiteboard to demonstrate how to divide up to a four-digit dividend by a one-digit divisor.
STUDENT PARTICIPATION
Practice Items and Activities: The learner will demonstrate how to divide up to a four-digit dividend by a one-digit divisor.
Feedback: The learner will receive feedback from me.
Student Groupings and Media Selections: The learner who showed mastery by achieving at least 90% proficiency on the district given division criterion-reference assessment will use markers and a whiteboard to demonstrate how to divide up to a four-digit dividend by a one-digit divisor.

Objective 7: Use the standard algorithm to divide up to a four-digit dividend by a one-digit divisor that includes interpreting remainders.
CONTENT PRESENTATION
Content: The learner will divide up to a four-digit dividend by a one-digit divisor that includes interpreting remainders.
Examples: 23 ÷ 5
Student Groupings and Media Selections: The learner who showed mastery by achieving at least 90% proficiency on the district given division criterion-reference assessment that includes interpreting remainders will use markers and a whiteboard to demonstrate how to divide up to a four-digit dividend by a one-digit divisor.
STUDENT PARTICIPATION
Practice Items and Activities: The learner will demonstrate how to divide up to a four-digit dividend by a one-digit divisor that includes interpreting remainders.
Feedback: The learner will receive feedback from me.
Student Groupings and Media Selections: The learner who showed mastery by achieving at least 90% proficiency on the district given division criterion-reference assessment that includes interpreting remainders will use markers and a whiteboard to demonstrate how to divide up to a four-digit dividend by a one-digit divisor.