

## **Week 1**

Objective: Review

### **Overview:**

- Monday: All operations review: Pg. 1-2. Drill students and correct in class. Have students quiz each other using flashcards, too.
- Tuesday: Review Pg. 9-10. Have students take turns “reading” the problems out loud as they solve them. (Especially after they complete Pg. 10).
- Wednesday: Multiplication/Division review. Pgs. 37 and 49.
- Thursday: Give students Math 4A Test.

### **Materials:**

- Math 4a Review Bucket, worksheets from Math 4a textbook.
- Foam blocks and other manipulatives, as needed

### **Key Vocabulary**

- Any words associated with review concepts (carrying, quotient, sum, etc..)

## **Lesson**

### **Warm-Up (15 min)**

Suggested Activities:

- Choose a problem to do together on the board from a suggested textbook page.
- Flyswatting warm-up: Write problems on the board and then “say” the problem. Students swat the problem you said (for example, read:  $5489/34=161$ ).
- ....your own activity!

### **Instruction: (15-30 min)**

This week is review. Choose a concept to review from each suggested worksheet and have class help recall how to solve the problems as much as possible.

**Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at time. If some students finish quickly, pass out additional practice of similar concepts.

#### **Suggested Group Activities:**

- Write several problems on the board and have students come up front and solve them.
- Have a student try to teach you and the class what you just taught them
- Have a student present a concept in Somali/other language to help lower ability English speakers

Math 4a Lesson Plans

- Drill students using flashcards OR have students try quizzing each other OR have a student come up front and quiz the class
- Flyswatting: write problems on the board. (1+2; 2+2; more complex problems for higher levels). Say only the solution and students have to find the problem that matches and swat.
- ....your own activity!

**Individual Practice: (15-30 min)**

Have student work on several problems on their own, with minimal help. Note student progress so ELC staff know who to transition into next math level for next semester.

## **Week 2**

Objective: Review from Level 3: Math Operations, Place Value and Addition

### **Overview:**

- Monday: Math Operation Drills. Pg. 1-2. Have students pair up and drill each other on operations using flashcard sets.
- Tuesday: Review place value, Pg. 3. Practice place value, Pg. 4-6.
- Wednesday: Practice place value, Pg. 7-9 and expanded notation.
- Thursday: Review place value and expanded notation, and adding/subtracting money. Pg. 10-13. Pass out money to students for Pg. 13.

### **Materials:**

- Math 4a Textbook Pgs. 1-13.
- Money for students to use for Pg. 13 (Thursday).

### **Key Vocabulary**

- Numbers
- Place Value: Ones, tens, hundreds, thousands
- Currency
- Plus, multiply, minus, equals

## **Lesson**

### **Warm-Up (15 min)**

Suggested Activities:

- Name introductions. Start by introducing yourself (My name is....) and then ask each student: "What is your name?". (Optional: Why are you taking math class?)

### **Instruction: (15-30 min)**

During this time, demonstrate concepts and then work on problems together as a class.

1) **Demonstrate:** Highlight one or two math concepts pertaining to this week's objectives on the board (for example, place value). Instruct off pages in Math 4a Textbook as necessary to highlight concepts before having students practice similar worksheets on their own. Teach as much language as possible while demonstrating concepts. For instance, while demonstrating  $5-2=3$ , repeat the phrase "five minus two equals three." Give students a chance to "read" the problem in English.

2) **Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at a time. If some students finish quickly, pass out additional practice of similar concepts.

**Suggested Group Activities:**

- Write several problems on the board and have students come up front and solve them.
- Have a student try to teach you and the class what you just taught them
- Fill out addition table together
- Drill students using flashcards OR have students try quizzing each other OR have a student come up front and quiz the class
- Flyswatting: write problems on the board. ( $1+2$ ;  $2+2$ ; more complex problems for higher levels). Say only the solution and students have to find the problem that matches and swat.
- ....your own activity!

Make sure to write what you taught in the **teacher's notes**.

**Individual Practice: (15-30 min)**

For each worksheet used, do several problems together for group work, and then let students try a few on their own, until class ends. Note students' progress or barriers in teacher notes. Have students who finish early come up and teach the class some of the problems.

## Week 3

Objective: Multiplying One- through Three-Digit Numbers

### Overview:

- Monday: Multiplication Review, drill students using flashcards; multiplying double digit with zeros. Pg. 14-15. Have students practice drills using flashcards with each other.
- Tuesday: Multiplying double digit with zeros, and multiplying with carrying. Pg. 16-17.
- Wednesday: Practice carrying. Pg. 19-20. Practice lining up numbers. Pg. 21.
- Thursday: Practice carrying and lining up problems, showing work. Pg. 22-24.

### Materials:

- Math 4a Textbook Pgs. 14-24.

### Key Vocabulary

- Numbers
- Multiply
- Factor, product
- Carrying (Also called “regroup”)—stick to carrying for simplicity’s sake.

## Lesson

### Warm-Up (15 min)

Suggested Activities:

- Review pages/concepts from previous week (write a problem on the board from last week’s lesson and do together as a class or individually). See previous week’s lesson for ideas. Have students come up to the board to do problems together.
- Review/Preteach Key vocabulary by demonstration and example.

### Instruction: (15-30 min)

During this time, demonstrate concepts and then work on problems together as a class.

1) **Demonstrate:** Highlight one or two math concepts pertaining to this week’s objectives on the board (for example, carrying). Instruct off pages in Math 4a Textbook as necessary to highlight concepts before having students practice similar worksheets on their own.

- Teach as much language as possible while demonstrating concepts. For instance, while demonstrating  $4 \times 2 = 8$ , repeat the phrase “four times two equals eight” Give students a chance to “read” the problem in English.

Math 4a Lesson Plans

2) **Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at time. If some students finish quickly, pass out additional practice of similar concepts.

**Suggested Group Activities:**

- Write several problems on the board and have students come up front and solve them.
- Have a student try to teach you and the class what you just taught them
- Have a student present a concept in Somali/other language to help lower ability English speakers
- Drill students using flashcards OR have students try quizzing each other OR have a student come up front and quiz the class
- Flyswatting: write problems on the board. ( $1+2$ ;  $2+2$ ; more complex problems for higher levels). Say only the solution and students have to find the problem that matches and swat.
- ....your own activity!

Make sure to write what you taught in the **teacher's notes**.

**Individual Practice: (15-30 min)**

For each worksheet used, do several problems together for group work, and then let students try a few on their own, until class ends. Note students' progress or barriers in teacher notes. Have students who finish early come up and teach the class some of the problems.

## Week 4

Objective: Multiplying by Two-Digit Numbers

### Overview:

- Monday: Review multiplication with flashcards; introduce multiplying by two-digit numbers. Pg. 25-27.
- Tuesday: Practice two digit multiplication. Pg. 28-29. Review multiplication with flashcards.
- Wednesday: Practice two digit multiplication. Pg. 30-33.
- Thursday: Practice two digit multiplication. Pg. 34-36.

### Materials:

- Math 4a Textbook Pgs. 25-36.
- Flashcards--multiplication.

### Key Vocabulary

- Numbers
- Multiply
- Factor, product
- Carrying (Also called “regroup”)—stick to carrying for simplicity’s sake.

## Lesson

### Warm-Up (15 min)

Suggested Activities:

- Review pages/concepts from previous week (write a problem on the board from last week’s lesson and do together as a class or individually). See previous week’s lesson for ideas. Have students come up to the board to do problems together.
- Review/Preteach Key vocabulary by demonstration and example.

### Instruction: (15-30 min)

During this time, demonstrate concepts and then work on problems together as a class.

1) **Demonstrate:** Highlight one or two math concepts pertaining to this week’s objectives on the board (for example, carrying). Instruct off pages in Math 4a Textbook as necessary to highlight concepts before having students practice similar worksheets on their own.

- Teach as much language as possible while demonstrating concepts. For instance, while demonstrating  $5-2=3$ , repeat the phrase “five minus two equals three.” Give students a chance to “read” the problem in English.

2) **Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at time. If some students finish quickly, pass out additional practice of similar concepts.

**Suggested Group Activities:**

- Write several problems on the board and have students come up front and solve them.
- Have a student try to teach you and the class what you just taught them
- Have a student present a concept in Somali/other language to help lower ability English speakers
- Drill students using flashcards OR have students try quizzing each other OR have a student come up front and quiz the class
- Flyswatting: write problems on the board. ( $1+2$ ;  $2+2$ ; more complex problems for higher levels). Say only the solution and students have to find the problem that matches and swat.
- ....your own activity!

Make sure to write what you taught in the **teacher's notes**.

**Individual Practice: (15-30 min)**

For each worksheet used, do several problems together for group work, and then let students try a few on their own, until class ends. Note students' progress or barriers in teacher notes. Have students who finish early come up and teach the class some of the problems.



## **Week 5**

Objective: Dividing One- and Two-Digit Numbers – Quiz 1

### **Overview:**

- Monday: Introduce/Review concept of division. Pg. 37. Pass out Quiz 1.
- Tuesday: Introduce/Review concept of division. Pg. 38. Pass out Quiz 1 to those who still need to take it.
- Wednesday: Introduce/Review concept of division. Pg. 38. Flyswatting game with simple division problems on board (see list of activities below for details).
- Thursday: Practice division. Correct Quiz 1 as a class.

### **Materials:**

- Math 4a Textbook Pgs. 37-41
- Additional division worksheets, as needed, from review bucket.
- Quiz 1

### **Key Vocabulary**

- Numbers
- Divide by
- equals

## **Lesson**

### **Warm-Up (15 min)**

Suggested Activities:

- Review pages/concepts from previous week (write a problem on the board from last week's lesson and do together as a class or individually). See previous week's lesson for ideas. Have students come up to the board to do problems together.
- Review/Preteach Key vocabulary by demonstration and example.

### **Instruction: (15-30 min)**

During this time, demonstrate concepts and then work on problems together as a class.

1) **Demonstrate:** Highlight one or two math concepts pertaining to this week's objectives on the board (for example, division with multi-digits). Instruct off pages in Math 4a Textbook as necessary to highlight concepts before having students practice similar worksheets on their own.

## Math 4a Lesson Plans

- Teach as much language as possible while demonstrating concepts. For instance, while demonstrating  $16/2=8$ , repeat the phrase “sixteen divided by two equals eight.” Give students a chance to “read” the problem in English.

2) **Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at time. If some students finish quickly, pass out additional practice of similar concepts.

### **Suggested Group Activities:**

- Write several problems on the board and have students come up front and solve them.
- Have a student try to teach you and the class what you just taught them
- Have a student present a concept in Somali/other language to help lower ability English speakers
- Drill students using flashcards OR have students try quizzing each other OR have a student come up front and quiz the class
- Flyswatting: write problems on the board. ( $8/2$ ;  $12/6$ , and etc.). Say only the solution and students have to find the problem that matches and swat.
- ....your own activity!

Make sure to write what you taught in the **teacher’s notes**.

### **Individual Practice: (15-30 min)**

For each worksheet used, do several problems together for group work, and then let students try a few on their own, until class ends. Note students’ progress or barriers in teacher notes. Have students who finish early come up and teach the class some of the problems.

Pass out Quiz 1 during this time to students who haven’t taken it. Correct in class on Thursday.

## Week 6

Objective: Division with Remainders

### Overview:

- Monday: Introduce division with remainders. Practice Pg. 42-43.
- Tuesday: Practice division with remainders, Pg. 45.
- Wednesday: Practice division with remainders, Pg. 46-47.
- Thursday: Practice division with remainders, Pg. 48-49.

### Materials:

- Math 4a Textbook Pgs. 42-49.
- Division/multiplication flashcards for review if needed.

### Key Vocabulary

- Number word names, up to thousands
- Divide by
- Equals
- remainder

## Lesson

### Warm-Up (15 min)

Suggested Activities:

- Review pages/concepts from previous week (write a problem on the board from last week's lesson and do together as a class or individually). See previous week's lesson for ideas. Have students come up to the board to do problems together.
- Review/Preteach Key vocabulary by demonstration and example.

### Instruction: (15-30 min)

During this time, demonstrate concepts and then work on problems together as a class.

1) **Demonstrate:** Highlight one or two math concepts pertaining to this week's objectives on the board (for example, remainders). Instruct off pages in Math 4a Textbook as necessary to highlight concepts before having students practice similar worksheets on their own.

- Teach as much language as possible while demonstrating concepts. For instance, while demonstrating  $16/2=8$ , repeat the phrase "sixteen divided by two equals eight." Give students a chance to "read" and "write" the problem in English.

Math 4a Lesson Plans

2) **Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at time. If some students finish quickly, pass out additional practice of similar concepts.

**Suggested Group Activities:**

- Write several problems on the board and have students come up front and solve them.
- Have a student try to teach you and the class what you just taught them
- Have a student present a concept in Somali/other language to help lower ability English speakers
- Drill students using flashcards OR have students try quizzing each other OR have a student come up front and quiz the class
- Flyswatting: write problems on the board. ( $1+2$ ;  $2+2$ ; more complex problems for higher levels). Say only the solution and students have to find the problem that matches and swat.
- ....your own activity!

Make sure to write what you taught in the **teacher's notes**.

**Individual Practice: (15-30 min)**

For each worksheet used, do several problems together for group work, and then let students try a few on their own, until class ends. Note students' progress or barriers in teacher notes. Have students who finish early come up and teach the class some of the problems.

## Week 7

Objective: Division with Remainders, cont. from Week 5

### Overview:

- Monday: Review division with remainders, Pg. 48. Practice using a grid to line up numbers, Pg. 49.
- Tuesday: Practice division with remainders, Pg. 51-52.
- Wednesday: Practice division with remainders, Pg. 53-54.
- Thursday: Practice division with remainders, Pg. 55-57.

### Materials:

- Math 4a Textbook Pgs. 49-57.
- If there's extra time, review worksheets from previous weeks (especially for students who finish early), or check Review bucket for more practice problems.

### Key Vocabulary

- Number word names, up to thousands
- Divide by
- Equals
- remainder

## Lesson

### Warm-Up (15 min)

Suggested Activities:

- Review pages/concepts from previous week (write a problem on the board from last week's lesson and do together as a class or individually). See previous week's lesson for ideas. Have students come up to the board to do problems together.
- Review/Preteach Key vocabulary by demonstration and example.

### Instruction: (15-30 min)

During this time, demonstrate concepts and then work on problems together as a class.

1) **Demonstrate:** Highlight one or two math concepts pertaining to this week's objectives on the board (for example, remainders). Instruct off pages in Math 4a Textbook as necessary to highlight concepts before having students practice similar worksheets on their own.

- Teach as much language as possible while demonstrating concepts. For instance, while demonstrating  $16/2=8$ , repeat the phrase "sixteen divided by two equals eight." Give students a chance to "read" and "write" the problem in English.

2) **Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at time. If some students finish quickly, pass out additional practice of similar concepts.

**Suggested Group Activities:**

- Write several problems on the board and have students come up front and solve them.
- Have a student try to teach you and the class what you just taught them
- Have a student present a concept in Somali/other language to help lower ability English speakers
- Drill students using flashcards OR have students try quizzing each other OR have a student come up front and quiz the class
- Flyswatting: write problems on the board. ( $1+2$ ;  $2+2$ ; more complex problems for higher levels). Say only the solution and students have to find the problem that matches and swat.
- ....your own activity!

Make sure to write what you taught in the **teacher's notes**.

**Individual Practice: (15-30 min)**

For each worksheet used, do several problems together for group work, and then let students try a few on their own, until class ends. Note students' progress or barriers in teacher notes. Have students who finish early come up and teach the class some of the problems.

## **Week 8**

Objective: Two Digit Division

### **Overview:**

- Monday: Introduce two digit division, Pg. 58. Do first problem on Pg. 59 together, and then let students do rest of Pg. 59 on their own. Check work. Additionally, pick out one worksheet as review from a previous week.
- Tuesday: Review Pg. 58-59, add Pg. 60. Additionally, pick out one worksheet as review from a previous week.
- Wednesday: Work on Pgs. 62-63. Additionally, pick out one worksheet as review from a previous week.
- Thursday: Review how to do two digit division, work on Pg. 64-65. Additionally, pick out one worksheet as review from a previous week.

### **Materials:**

- Math 4a Textbook, Pg. 58-65.
- Pick out a worksheet from earlier in the textbook to review previously learned concepts OR choose more practice problems from Review bucket, especially for students who finish work early.

### **Key Vocabulary**

- Number word names, up to thousands
- Divide by
- Equals
- Remainder
- quotient

## **Lesson**

### **Warm-Up (15 min)**

Suggested Activities:

- Review pages/concepts from previous week (write a problem on the board from last week's lesson and do together as a class or individually). See previous week's lesson for ideas. Have students come up to the board to do problems together.
- Review/Preteach Key vocabulary by demonstration and example.

### **Instruction: (15-30 min)**

During this time, demonstrate concepts and then work on problems together as a class.

## Math 4a Lesson Plans

1) **Demonstrate:** Highlight one or two math concepts pertaining to this week's objectives on the board (for example, division). Instruct off pages in Math 4a Textbook as necessary to highlight concepts before having students practice worksheets on their own.

- Teach as much language as possible while demonstrating concepts. For instance, while demonstrating  $16/2=8$ , repeat the phrase "sixteen divided by two equals eight." Give students a chance to "read" the problem in English.

2) **Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at time. If some students finish quickly, pass out additional practice of similar concepts.

### **Suggested Group Activities:**

- Write several problems on the board and have students come up front and solve them.
- Have a student try to teach you and the class what you just taught them
- Have a student present a concept in Somali/other language to help lower ability English speakers
- Drill students using flashcards OR have students try quizzing each other OR have a student come up front and quiz the class
- Flyswatting: write problems on the board. ( $1+2$ ;  $2+2$ ; more complex problems for higher levels). Say only the solution and students have to find the problem that matches and swat.
- ....your own activity!

Make sure to write what you taught in the **teacher's notes**.

### **Individual Practice: (15-30 min)**

For each worksheet used, do several problems together for group work, and then let students try a few on their own, until class ends. Note students' progress or barriers in teacher notes. Have students who finish early come up and teach the class some of the problems.



## Week 9

Objective: Two-Digit Division; Quiz 2

### Overview:

- Monday: Review two digit division, Pg. 58. Work on Pg. 66. Pass out Quiz 2.
- Tuesday: Review two digit division, Pg. 67-68. Pass out Quiz 2 to anyone who did not take it on Monday.
- Wednesday: Review two digit division, Pg. 69-70. Pass out Quiz 2 to anyone who has not taken it yet.
- Thursday: Practice two digit division, Pg. 71-72. Correct Quiz 2 as a class.

### Materials:

- Math 4a Textbook Pgs. 63, 66-72.
- Quiz 2

### Key Vocabulary

- Number word names, up to thousands
- Divide by
- Equals
- Remainder
- quotient

## Lesson

### Warm-Up (15 min)

Suggested Activities:

- Review pages/concepts from previous week (write a problem on the board from last week's lesson and do together as a class or individually). See previous week's lesson for ideas. Have students come up to the board to do problems together.
- Review/Preteach Key vocabulary by demonstration and example.

### Instruction: (15-30 min)

During this time, demonstrate concepts and then work on problems together as a class.

1) **Demonstrate:** Highlight one or two math concepts pertaining to this week's objectives on the board (for example, division). Instruct off pages in Math 4a Textbook as necessary to highlight concepts before having students practice worksheets on their own.

- Teach as much language as possible while demonstrating concepts. For instance, while demonstrating  $16/2=8$ , repeat the phrase "sixteen divided by two equals eight." Give students a chance to "read" the problem in English.

Math 4a Lesson Plans

2) **Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at time. If some students finish quickly, pass out additional practice of similar concepts.

**Suggested Group Activities:**

- Write several problems on the board and have students come up front and solve them.
- Have a student try to teach you and the class what you just taught them
- Have a student present a concept in Somali/other language to help lower ability English speakers
- Drill students using flashcards OR have students try quizzing each other OR have a student come up front and quiz the class
- Flyswatting: write problems on the board. ( $1+2$ ;  $2+2$ ; more complex problems for higher levels). Say only the solution and students have to find the problem that matches and swat.
- ....your own activity!

Make sure to write what you taught in the **teacher's notes**.

**Individual Practice: (15-30 min)**

For each worksheet used, do several problems together for group work, and then let students try a few on their own, until class ends. Note students' progress or barriers in teacher notes. Have students who finish early come up and teach the class some of the problems.

\*Pass out Quiz 2 during Individual Practice Time. Correct as a class on Thursday.

## **Week 10**

Objective: Two-Digit Division cont.

### **Overview:**

- **Monday:** Review how to do two digit division, Pg. 63. Work on Pg. 65 as a review. Check work. Additionally, pick out one worksheet as review from a previous week.
- **Tuesday:** Review Pg. 58-59, add Pg. 60. Additionally, pick out one worksheet as review from a previous week.
- **Wednesday:** Work on Pgs. 62-63. Additionally, pick out one worksheet as review from a previous week.
- **Thursday:** Review how to do two digit division, work on Pg. 64-65. Additionally, pick out one worksheet as review from a previous week.

### **Materials:**

- Math 4a Textbook Pgs. 63, 65, 74-76.
- One page from textbook as a review exercise (you can choose which to review!).

### **Key Vocabulary**

- Number word names, up to thousands
- Divide by
- Equals
- Remainder
- quotient

## **Lesson**

### **Warm-Up (15 min)**

Suggested Activities:

- Review pages/concepts from previous week (write a problem on the board from last week's lesson and do together as a class or individually). See previous week's lesson for ideas. Have students come up to the board to do problems together.
- Review/Preteach Key vocabulary by demonstration and example.

### **Instruction: (15-30 min)**

During this time, demonstrate concepts and then work on problems together as a class.

1) **Demonstrate:** Highlight one or two math concepts pertaining to this week's objectives on the board (for example, division). Instruct off pages in Math 4a Textbook as necessary to highlight concepts before having students practice worksheets on their own.

#### Math 4a Lesson Plans

- Teach as much language as possible while demonstrating concepts. For instance, while demonstrating  $16/2=8$ , repeat the phrase “sixteen divided by two equals eight.” Give students a chance to “read” the problem in English.

2) **Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at time. If some students finish quickly, pass out additional practice of similar concepts.

#### **Suggested Group Activities:**

- Write several problems on the board and have students come up front and solve them.
- Have a student try to teach you and the class what you just taught them
- Have a student present a concept in Somali/other language to help lower ability English speakers
- Drill students using flashcards OR have students try quizzing each other OR have a student come up front and quiz the class
- Flyswatting: write problems on the board. ( $1+2$ ;  $2+2$ ; more complex problems for higher levels). Say only the solution and students have to find the problem that matches and swat.
- ....your own activity!

Make sure to write what you taught in the **teacher’s notes**.

#### **Individual Practice: (15-30 min)**

For each worksheet used, do several problems together for group work, and then let students try a few on their own, until class ends. Note students’ progress or barriers in teacher notes. Have students who finish early come up and teach the class some of the problems.

## **Week 11**

Objective: Division Word Problems

### **Overview:**

- **Monday:** Work on word problems, Pg. 77. Do one problem together on the board before passing out worksheets. Teach English as needed, and have students read problems out loud. Additionally, pick out one worksheet as review from a previous week (either division-related or from beginning of semester is fine).
- **Tuesday:** Work on word problems, Pg. 77 again. Teach English as needed, and have students read problems out loud. Additionally, pick out one worksheet as review from a previous week (either division-related or from beginning of semester is fine).
- **Wednesday:** Work on word problems, Pg. 78. Teach English as needed, and have students reads problems out loud. Additionally, pick out one worksheet as review from a previous week (either division-related or from beginning of semester is fine).
- **Thursday:** Review charts. Work on word problems, Pg. 78. Teach English as needed, and have students reads problems out loud. Additionally, pick out one worksheet as review from a previous week (either division-related or from beginning of semester is fine).

### **Materials:**

- Math 4a Textbook Pgs. 77-78, use additional worksheets for review or extra practice as needed.

### **Key Vocabulary**

- Number word names, up to thousands
- Charts
- English vocabulary as needed for word problems

## **Lesson**

### **Warm-Up (15 min)**

Suggested Activities:

- Review pages/concepts from previous week (write a problem on the board from last week's lesson and do together as a class or individually). See previous week's lesson for ideas. Have students come up to the board to do problems together.

### **Instruction: (15-30 min)**

During this time, demonstrate concepts and then work on problems together as a class.

## Math 4a Lesson Plans

1) **Demonstrate:** Highlight one or two math concepts pertaining to this week's objectives on the board (for example, place value). Instruct off pages in Math 4a Textbook as necessary to highlight concepts before having students practice worksheets on their own.

- Teach as much language as possible while demonstrating concepts. For instance, while demonstrating  $156/3=52$ , repeat the phrase "one hundred fifty two divided by three equals fifty-two." Give students a chance to "read" the problem in English.

2) **Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at time. If some students finish quickly, pass out additional practice of similar concepts.

### **Suggested Group Activities:**

- Write several problems on the board and have students come up front and solve them.
- Have a student try to teach you and the class what you just taught them
- Have a student present a concept in Somali/other language to help lower ability English speakers
- Drill students using flashcards OR have students try quizzing each other OR have a student come up front and quiz the class
- Flyswatting: write problems on the board. ( $1+2$ ;  $2+2$ ; more complex problems for higher levels). Say only the solution and students have to find the problem that matches and swat.
- ....your own activity!

Make sure to write what you taught in the **teacher's notes**.

### **Individual Practice: (15-30 min)**

For each worksheet used, do several problems together for group work, and then let students try a few on their own, until class ends. Note students' progress or barriers in teacher notes. Have students who finish early come up and teach the class some of the problems.

## Week 12

Objective: Reading Charts and Graphs

### Overview:

- Monday: Introduce charts and graphs. Show pictures of charts and graphs so students know what these are. Do Pg. 79-80. Teach English as needed, and have students read problems out loud. Pick out one worksheet as review from a previous week as a warm-up or concluding activity. Create a bar graph for the class using Post-its (instructions below.)
- Tuesday: Review charts and graphs. Pg. 80-82. Teach English as needed, and have students read problems out loud. Pick out one worksheet as review from a previous week as a warm-up or concluding activity. Create a bar graph for the class using Post-its (instructions below.)
- Wednesday: Introduction to charts. Work on word problems, Pg. 84, 86-87. Teach English as needed, and have students read problems out loud. Pick out one worksheet as review from a previous week as a warm-up or concluding activity.
- Thursday: Review charts. Work on word problems, Pg. 88-90. Teach English as needed, and have students read problems out loud. Pick out one worksheet as review from a previous week as a warm-up or concluding activity.

### Materials:

- Math 4a Textbook Pgs. 79-90
- Post-its for making homemade bar graph.

### Key Vocabulary

- Number word names
- Chart
- Graph
- Bars, bar graph
- X axis
- Y axis

## Lesson

### Warm-Up (15 min)

Suggested Activities:

- Review pages/concepts from previous week (write a problem on the board from last week's lesson and do together as a class or individually). See previous week's lesson for ideas. Have students come up to the board to do problems together.
- Review/Preteach Key vocabulary by demonstration and example.

**Instruction: (15-30 min)**

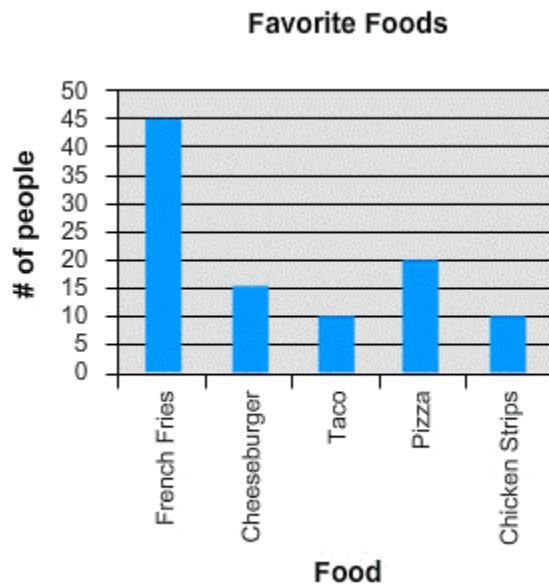
During this time, demonstrate concepts and then work on problems together as a class.

1) **Demonstrate:** Highlight one or two math concepts pertaining to this week’s objectives on the board (for example, charts or graphs). Instruct off pages in Math 4a Textbook as necessary to highlight concepts before having students work on it (“I do it”). Teach as much language as possible while demonstrating concepts. Give students a chance to “read” the problems out loud in English.

2) **Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at time. If some students finish quickly, pass out additional practice of similar concepts, or have student work with a student or come to teach the class how to do problems at the board. Encourage them to explain problems to the class in English.

**Suggested Group Activities:**

- Create a homemade bar graph. Ask students a question: For example, you could ask, What is your Favorite Food? What is your hometown? Create an X and Y axis on the board, and label one Y axis with # of students, and the X axis with list of favorite foods. Students come up and organize their post-its into a bar graph.



Other Activities:

- Write several problems on the board and have students come up front and solve them.
- Have everyone use manipulatives at the same time and walk around to check that they are correct.



#### Math 4a Lesson Plans

- Have a student try to teach you and the class what you just taught them
- Have a student present a concept in Somali/other language to help lower ability English speakers
- Drill students using flashcards OR have students try quizzing each other OR have a student come up front and quiz the class
- Flyswatting: write problems or words (addition/subtraction/charts/graphs) on the board and say a word and have student “swat” the correct word.

Make sure to write what you taught in the **teacher’s notes**.

#### **Individual Practice: (15-30 min)**

For each worksheet used, do several problems together for group work, and then let students try a few on their own, until class ends. Note students’ progress or barriers in teacher notes. Have students who finish early come up and teach the class some of the problems.

## **Week 13**

Objective: Telling Time and Using a Calendar

### **Overview:**

- **Monday:** Pg. 91-92. Introduce hours and minutes. Use clocks to practice reading time as a class. Pick out one worksheet as review from a previous week as a warm-up or concluding activity.
- **Tuesday:** Pg. 92-93. Discuss what time students eat lunch, dinner, etc., or some other daily activity (if during Ramadan – skip talking about food). Teach English as needed, and have students reads problems out loud. Pick out one worksheet as review from a previous week as a warm-up or concluding activity.
- **Wednesday:** Pg. 96. Introduce calendars. Discuss dates and numbers of days in each month. Teach English as needed, and have students reads problems out loud. Practice writing/speaking days and months.
- **Thursday:** 96-98. Teach “calendar.” Discuss days, weeks, and months. Teach English as needed, and have students reads problems out loud. Review clocks, Pg. 95, if there’s time.

### **Materials:**

- Math 4a Textbook Pgs. 91-98
- Large and small clocks from teacher room (see staff for help finding, if needed).
- Calendars (Wed-Thurs)

### **Key Vocabulary**

- Number word names
- Calendar
- Clock
- Day
- month
- What time is it? It’s...

## **Lesson**

### **Warm-Up (15 min)**

Suggested Activities:

- Review pages/concepts from previous week (write a problem on the board from last week’s lesson and do together as a class or individually). See previous week’s lesson for ideas. Have students come up to the board to do problems together.
- Review/Preteach Key vocabulary by demonstration and example.
- Wed-Thurs: review reading clocks (look at Pg. 91-95 for ideas).

### **Instruction: (15-30 min)**

## Math 4a Lesson Plans

During this time, demonstrate concepts and then work on problems together as a class.

1) **Demonstrate:** Highlight one or two math concepts pertaining to this week's objectives on the board (for example, reading the date or time). Instruct off pages in Math 4a Textbook as necessary to highlight concepts before having students practice similar worksheets on their own.

2) **Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at time. If some students finish quickly, pass out additional practice of similar concepts.

### **Suggested Group Activities:**

- Pass out clocks and have students copy large clock for different times.
- Discuss what time Math class starts and ends. Repeat with English class.
- Chant days of the week/months of the year together.
- Write a time on the board and have students work in pairs to create the time on their clocks.
- Have a student try to teach you and the class what you just taught them
- Have a student present a concept in Somali/other language to help lower ability English speakers
- Flyswatting: draw analog clocks on the board with various times. Say a time and have students swat the correct clock (Wed-Thurs: write days of the week or months on the board).
- ....your own activity!

Make sure to write what you taught in the **teacher's notes**.

### **Individual Practice: (15-30 min)**

For each worksheet used, do several problems together for group work, and then let students try a few on their own, until class ends. Note students' progress or barriers in teacher notes. Have students who finish early come up and teach the class some of the problems.

## **Week 14**

Objective: Review – Quiz 3

### **Overview:**

- **Monday:** Review division problems and charts. Use worksheets from textbook or Math 4a Review Bucket.
- **Tuesday:** Review division problems and charts. Use worksheets from textbook or Math 4a Review Bucket. Pass out Quiz 3 during independent work time.
- **Wednesday:** Review division problems and charts. Use worksheets from textbook or Math 4a Review Bucket. Pass out Quiz 3 during independent work time to students who still need to take it.
- **Thursday:** Continue to review and correct Quiz 3 as a class. Note student progress in binder.

### **Materials:**

- Math 4a Review Bucket, worksheets from Math 4a textbook.
- Foam blocks and other manipulatives, as needed

### **Key Vocabulary**

- Number word names
- Place Value: Ones, tens, hundreds, thousands
- Add, multiply, subtract, divide
- Equals
- Sum, product, quotient
- Remainders
- Graphs, X and Y axis
- Clocks, calendars

## **Lesson**

### **Warm-Up (15 min)**

Suggested Activities:

- Review pages/concepts from previous week (write a problem on the board from last week's lesson and do together as a class or individually). See previous week's lesson for ideas. Have students come up to the board to do problems together.
- Review/Preteach Key vocabulary by demonstration and example.

### **Instruction: (15-30 min)**

During this time, demonstrate concepts and then work on problems together as a class.

## Math 4a Lesson Plans

1) **Demonstrate:** Highlight one or two math concepts pertaining to this week's objectives on the board (for example, place value). Instruct off pages in Math 4a Textbook as necessary to highlight concepts before having students practice similar worksheets on their own. Teach as much language as possible while demonstrating concepts. Give students a chance to "read" and "write" the problem in English. (For example: have them write out  $6/2=3$ , or "six divided by two equals three.")

2) **Group Work:** Lead group work on targeted concepts. Pass out one page of a worksheet at time. If some students finish quickly, pass out additional practice of similar concepts.

**Suggested Group Activities** (adjust according to objectives and level taught):

- Write several problems on the board and have students come up front and solve them.
- Have everyone use manipulatives at the same time and walk around to check that they are correct.
- Have a student try to teach you and the class what you just taught them
- Have a student present a concept in Somali/other language to help lower ability English speakers
- Drill students using flashcards OR have students try quizzing each other OR have a student come up front and quiz the class
- Flyswatting: write problems on the board. ( $1+2$ ;  $2+2$ ; more complex problems for higher levels). Say only the solution and students have to find the problem that matches and swat.
- ....your own activity!

Make sure to write what you taught in the **teacher's notes**.

### **Individual Practice: (15-30 min)**

Have student work on several problems on their own, with minimal help. Note student progress so ELC staff know who to transition into a more advanced math level.