Note: In this program, Units 1 to 5 contain readiness language content. The key words were selected from previous math levels and lead the students into the grade 6 program. All key terms are based on the Math Standards for Alaska and reflect terms vital to academic achievement in math.
Key Vocabulary

IDENTIFY
To recognize something. This can involve one or all of the five senses. This includes identifying simple fractions.

DESCRIBE
To tell something about an item, situation, etc. This includes describing patterns in the number system.

EXPLAIN
To tell why, who, where, how, etc. This includes explaining math operations.
Key Vocabulary

ORDER

To put something in a sequence. This also relates to the order of operations in math.

MODEL

To show or represent something. For example, modeling one-to-one correspondence with whole numbers.
LESSONS
LISTENING

Same or Different?
Provide each student with two blank flashcards. Each student should then make a happy face on one of his/her cards and a sad face on the other card. When the students’ cards are ready, say two sentences, using the math terms from this unit. If the two sentences are exactly the same, the students should hold up their happy face cards. However, if there is any difference between the two sentences, the students should hold up their sad face cards. Repeat, using a number of different pairs of sentences.

Flashlight Find
Mount the math vocabulary pictures on the walls, board and windows. Have a student stand in the center of the classroom with a flashlight. Say one of the vocabulary words and the student must find the picture for the vocabulary word you said using the light of the flashlight. This activity may also be conducted in teams. In this case, have two flashlights available. Have a player from each team stand in the center of the classroom. When you say the vocabulary word, each player must attempt to find the correct picture with the light of his/her flashlight. The first player to correctly identify the picture for the vocabulary word you said wins the round. Repeat until all players have played.

SPEAKING

Right or Wrong?
Mount the vocabulary pictures on the board. Point to one of the pictures and say its vocabulary word. The students should repeat the vocabulary word for that picture. However, when you point to a picture and say an incorrect vocabulary word for it, the students should remain silent. Repeat this process until the students have responded a number of times to the different vocabulary pictures.

Visual Memory
Mount the math vocabulary pictures on the board. The students should look carefully at the pictures. Then, have the students close their eyes. Remove one of the pictures from the board and place it to the side. The students should then open their eyes and identify the “missing picture.” Continue in this way until all of the pictures have been removed. Another way to conduct this activity is to do the reverse. In this case, prepare two or three extra sets of vocabulary pictures. Mount a number of pictures on the board. The students should look carefully at the pictures. Then, have the students close their eyes. Add another picture to the board. The students should open their eyes and identify the “new picture.” This activity (and the previous form of the activity) may be done in team form. In this case, the first player to identify the new or missing picture wins the round.
**Language and Skills Development**

**READING**

**Face**
Mount the sight words around the classroom on the walls, board, and windows. Group the students into two teams. Give the first player in each team a flashlight. Darken the classroom, if possible. Say one of the sight words. When you say “Go,” the students should turn their flashlights on and attempt to locate the sight word you said. The first player to do this correctly wins the round. Repeat until all players in each team have participated.

**Circle of Words**
Before the activity begins, prepare a page that contains the sight words. Provide each student with a copy of the page. The students should cut the sight words from their pages. When a student has cut out the sight words, he/she should lay them on his/her desk in a circle. Then, each student should place a pen or pencil in the center of the circle of sight word cards. Each student should spin the pen/pencil. Say a sight word. Any student or students whose pens/pencils are pointing to the sight word you said, should call “Bingo.” The student or students should then remove those sight words from their desks. Continue in this way until a student or students have no sight words left on their desks.

**WRITING**

**Letter Encode**
Provide each student with four copies of the alphabet page from the end of this unit. The students should cut out the letters and place them in individual envelopes. Each student should write his/her name on the envelope. These cut out letters will be used for encoding activities throughout this math enrichment program. Have the students lay their cut out letters on the floor or desks. Show a picture from this unit. The students should then use the cut out letters to spell the word for it. Repeat this process, until all of the math words have been spelled.

**Numbered Illustrations**
Mount the vocabulary pictures on the chalkboard and number each one. Provide each student with writing paper and a pen. Call the number of a picture. Each student should write the vocabulary word for the picture represented by that number. Repeat until all vocabulary words have been written. Review the students’ responses.
VOCABULARY

PICTURES
DESCRIBE
EXPLAIN
IDENTIFY
MODEL
ORDER
STUDENT SUPPORT MATERIALS

Listening • Mini Pictures
Listening: Mini Pictures

Say the key math words for this unit and associate each word with a number from one to five. The students must write the numbers of the words under their pictures.
STUDENT SUPPORT MATERIALS

Reading • Sight Recognition and Encoding

Reading Comprehension
explain
describe
identify
Sight Words Activity Page

Have the students circle the word for each picture.

identify
describe
explain
order
model

identify
describe
explain
order
model

identify
describe
explain
order
model

identify
describe
explain
order
model
Encoding Activity Page

Have the students cut out the word halves and glue them together to create the key words for this unit.

- or
- plain
- ex
- cribe
- iden
- der
- des
- del
- mo
- tify
Encoding Activity Page

Have the students cut out the word parts and glue them into their correct words.

_____________________________der

ex_____________________________ain

i_____________________________tify

descr_____________________________

_____________________________del

ibe | or | mo

pl | den
### Word and Definition Match

*Have the students write the word numbers under their matching definitions.*

<table>
<thead>
<tr>
<th>This is when we know what something, someone, etc. is.</th>
<th>This is when we tell how something looks, acts, or works, etc.</th>
<th>This is something we do when we sleep.</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is a type of book used in math.</td>
<td>This is when we tell how, why, when, etc. about something.</td>
<td>This is when we add whole numbers and fractions together.</td>
</tr>
<tr>
<td>This is when we think about what happens first, second, etc.</td>
<td>This is when we ask a question about math.</td>
<td>This is when we show how something works, looks, etc.</td>
</tr>
</tbody>
</table>

| 1. explain | 2. order | 3. model | 4. describe | 5. identify |
What’s the Answer?

Have the students read the text and then select the correct answer for it. They should fill in the appropriate bullet beside the answer of their choice.

1. What is the order used in addition, multiplication, subtraction, and division?
   - It is the use of whole numbers in place of fractions.
   - It is what needs to be done first, second, and so on.
   - It is when a person buys a math book.

2. What can we describe in math?
   - the weather
   - how to solve a problem
   - the things we need to read

3. What order is there in math?
   - colors
   - operations
   - smells

4. How can a person explain something in math?
   - by telling how he/she got the answer
   - by going to sleep after finding the answer
   - by not saying anything after finding the answer

5. What is one thing we can identify in math?
   - what we have to do to find food
   - what we might do to solve a problem
   - what we might show before eating a meal
STUDENT SUPPORT MATERIALS

Basic Writing
Crossword Puzzle

ACROSS
1. To tell why, who, where, how, etc. This includes explaining math operations.
2. To recognize something. This can involve one or all of the five senses. This includes identifying simple fractions.
3. To put something in a sequence. This also relates to the order of operations in math.
4. To show or represent something. For example, modeling one-to-one correspondence with whole numbers.
5. To tell something about an item, situation, etc. This includes describing patterns in the number system.

DOWN
2. To recognize something. This can involve one or all of the five senses. This includes identifying simple fractions.

www.CrosswordWeaver.com
Crossword Puzzle Answers

EXPLAIN

D

ORDER

M

ENT

MODEL

IFY

DESCRIBE
Basic Writing Activity Page

Have the students write the word for each picture.
Alphabet Page Letter Encode

a  b  c  d  e  f

g  h  i  j  k  l

m  n  o  p  q  r

s  t  u  v  w  x

y  z
Teacher note: When using the Developmental Language Process in math, listening comprehension and creative writing are not always used. However, we have included these skills in this assessment. It is your decision as to whether or not to include them in the unit’s assessment.
Unit Assessment

Provide each student with a copy of the students’ pages. Read the following instructions aloud. The students should answer the questions on their copies of the assessment.

BASIC LISTENING
Turn to page 1 in your test. Look at the pictures in the boxes.

1. Write the number 1 on top of the picture for IDENTIFY.
2. Write the number 2 on top of the picture for DESCRIBE.
3. Write the number 3 on top of the picture for EXPLAIN.
4. Write the number 4 on top of the picture for ORDER.
5. Write the number 5 on top of the picture for MODEL.

LISTENING COMPREHENSION
Turn to page 2 in your test. Listen to the sentences I say. Circle “T” for true and “F” for false sentences.

1. When we identify something, we know what it is.
2. When we describe something, we tell something about it.
3. When we explain something, we don’t know what it is.
4. When things are in order, they are mixed-up.
5. When we model something, we show how to do it.

SIGHT RECOGNITION
Turn to page 3 in your test. Look at the pictures in the boxes. Circle the word for each picture.

DECODING/ENCODING
Turn to page 4 in your test. Look at the word parts in the boxes. Circle the other half or part of each word.
**Unit Assessment**

Provide each student with a copy of the students’ pages. Read the following instructions aloud. The students should answer the questions on their copies of the assessment.

**READING COMPREHENSION**
Turn to page 5 in your test. Read the sentence part and fill in the bullet for the correct sentence ending.

**BASIC WRITING**
Turn to page 6 in your test. Look at the pictures in the boxes. Write the word for each picture.

**CREATIVE WRITING**
Turn to page 7 in your test. Write a sentence of your own, using each word.
Teacher: To get a percentage for this student’s assessment, divide the total number of questions correct by the total number of questions, then multiply this answer by 100 to determine the percentage of questions answered correctly.
1. T F
2. T F
3. T F
4. T F
5. T F
1. When we identify something,
   - we say we have never seen it before.
   - we don’t know what it is.
   - we know what it is.

2. We can use the following to describe something:
   - air.
   - words.
   - ears.

3. When we explain something, we
   - tell about it.
   - ask about it.
   - say we never did it.

4. When things are in order, they are
   - disorganized.
   - big.
   - organized.

5. When we show how to do something, we are
   - predicting.
   - modeling.
   - inferring.