UNIT 4

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
Key Vocabulary

EVEN
Numbers that can be divided by 2.

ODD
Numbers that cannot be divided by 2.

NUMERAL
A symbol used to represent a number.
Key Vocabulary

NUMERICAL
This relates to numbers. Things are represented by numbers rather than by letters.

SYMBOL
These represent math operations.
LESSONS
Language and Skills Development

LISTENING

Nod and Clap
Mount the vocabulary pictures on the board. Point to one of the pictures and say its name. The students should nod their heads to indicate that you said the correct vocabulary word for the picture. However, when you point to a picture and say an incorrect name for it, the students should clap their hands ONCE. Repeat this process until all of the vocabulary pictures have been used a number of times in this way.

Mini Pictures
Provide each student with a copy of the mini-pictures page from the Student Support Materials. When you say the key words, the students must find the pictures for them. Then, have the students cut out the pictures. Say the keywords and the students should hold up the pictures for them.

Student Support Materials
Have the students work on the activity pages from the Student Support Materials from this unit. Afterward, review their work.

SPEAKING

Half Match
Before the lesson begins, prepare a photocopy of each of the vocabulary pictures. Cut each of the photocopied pictures in half. Give the picture halves to the students (a student may have more than one picture half). Say one of the vocabulary words. The two students who have the halves of the picture for that word must show their halves and repeat the word orally. Continue in this way until all of the vocabulary words have been reviewed. This activity may be repeated more than once by collecting, mixing, and redistributing the picture halves to the students. This activity may also be adapted for team form. To do this, cut each of the vocabulary pictures in half. Place half of the pictures in one pile and the other halves in another pile (one pile for each team). Say a vocabulary word. When you say “Go,” the first player from each team must rush to his/her pile of picture halves. Each player must find the half of the picture for the vocabulary word you said. The first player to correctly identify the picture half and to repeat the vocabulary word for it wins the round. Repeat until all players have played.
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.

Flashlight Encode
Cut each of the sight words in half. Mount all of the word halves in a scattered form on the chalkboard. Stand in front of the chalkboard with two flashlights. Shine the light of one flashlight on a word half. Then, shine the light of the other flashlight on its matching half. The students should say the sight word. However, when the lights of the two flashlights are shining on word halves that do not go together, the students should remain silent. If four flashlights are available, this activity may be done in team form. In this case, give the first player in each team two flashlights. Say a sight word. The first player in each team must then use his/her two flashlights to illuminate the word halves for the sight word you said. The first player to do this correctly wins the round.

Letter Encode
Give each student his/her envelope that contains the alphabet letters. Show a picture from this unit. The students must use the cut out letters to spell the word for the picture. Review the students’ work. Repeat, until all of the words have been spelled.

WRITING

Watch Your Half
Prepare a photocopy of each of the vocabulary pictures. Cut the photocopied pictures in half. Keep the picture halves in separate piles. Group the students into two teams. Give all of the picture halves from one pile to the players in Team One. Give the picture halves from the other pile to the players in Team Two. Say a vocabulary word. When you say “Go,” the student from each team who has the picture half for the vocabulary word you said should rush to the board and write the word on the board. The first player to do this correctly wins the round. Repeat until all players have participated. This activity may be played more than once by collecting, mixing, and redistributing the picture halves to the two teams.

Student Support Materials
Have the students work on the activity pages from the Student Support Materials from this unit. Afterward, review their work.
VOCABULARY

PICTURES
EVEN
NUMERAL
NUMERICAL
ODD
SYMBOL
STUDENT SUPPORT MATERIALS

Listening • Mini Pictures
Numbered 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.
Mini Pictures

Provide each student with a copy of this page. The students should cut out the pictures and lay them on the floor or desks. Say the key words a number of times; the students must hold up the pictures for the words you say. You can also have pairs of students participate in the activity, to see which student can locate the correct graphic first. Later, say three words and the students must find the correct pictures to reproduce the sequence of words that you said. Repeat using different sequences of key words.
STUDENT SUPPORT MATERIALS

Reading • Sight Recognition and Encoding

Reading Comprehension
symbol

numerical
Sight Words Activity Page

Have the students circle the word for each picture.
Encoding Activity Page

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

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

- o__________________
- ev__________________
- nu__________________al
- numer__________________cal
- sym__________________

en    bol    dd

mer    i
**Word and Definition Match**

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

<table>
<thead>
<tr>
<th>These numbers can be divided by 2.</th>
<th>This is a math sentence that has parentheses.</th>
<th>This is a symbol for a number.</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is something that can be used to show math words.</td>
<td>This is a set.</td>
<td>This is a set with different elements.</td>
</tr>
<tr>
<td>This is when we convert numbers.</td>
<td>These numbers cannot be divided by 2.</td>
<td>This relates to numbers.</td>
</tr>
</tbody>
</table>

1. even 2. odd 3. numeral 4. numerical 5. symbol
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. When is a number even?
   - ○ when it can be divided by 3
   - ○ when it cannot be divided by 2
   - ○ when it can be divided by 2

2. When is a number odd?
   - ○ when it can be divided by 2
   - ○ when it cannot be divided by 2
   - ○ when it can be divided by 3

3. What is an example of a numeral?
   - ○ 2 is a numeral.
   - ○ Y is a numeral.
   - ○ + is a numeral.

4. What does numerical relate to?
   - ○ shapes
   - ○ sizes
   - ○ numbers

5. Which one of these is a math symbol?
   - ○ symbol
   - ○ @
   - ○ =
Which Belongs?

Have the students write the word that is correct for each sentence.

1. An **even/oven** number can be divided by 2.

2. An **equal/odd** number cannot be divided by 2.

3. A **numeral/element** is a number.

4. **Numerical/Label** is about numbers.

5. **Parentheses/Symbols** show different math operations and other things.
STUDENT SUPPORT MATERIALS

Basic Writing
Crossword Puzzle

**ACROSS**

3 Numbers that can be divided by 2.
4 This relates to numbers.
5 Numbers that cannot be divided by 2.

**DOWN**

1 A symbol used to represent a number.
2 This represents operations and other aspects of math operations.
Crossword Puzzle Answers

- N U M E R I C A L
- B O D D L
- S Y  E V E N R
- N U M
Basic Writing Activity Page

Have the students write the word for each picture.
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.
MATH PROGRAM

Unit Assessment Teacher’s Notes
Grade 6 • Unit 4

Date:________________
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 EVEN numbers.
2. Write the number 2 on top of the picture for ODD numbers.
3. Write the number 3 on top of the picture for NUMERAL.
4. Write the number 4 on top of the picture for NUMERICAL.
5. Write the number 5 on top of the picture for SYMBOL.

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. Even numbers can be divided by 3.
2. Odd numbers cannot be divided by 2.
3. A numeral shows a number.
4. Numerical relates to parentheses.
5. The equal sign is a symbol used in math.

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.
Date:_____________    Student’s Name:____________________

Number Correct:_____________    Percent Correct:_____________
<table>
<thead>
<tr>
<th></th>
<th>T</th>
<th>F</th>
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</thead>
<tbody>
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</tbody>
</table>
even
odd
numeral
numerical
symbol
Even numbers
   ○ are converted.
   ○ can be divided by 2.
   ○ have various elements.

Odd numbers
   ○ can be divided by 3.
   ○ cannot be divided by 2.
   ○ can be divided by 2.

Which of these is a numeral?
   ○ y
   ○ ( 
   ○ 4

Numerical has to do with
   ○ labels.
   ○ numbers.
   ○ inequality.

Which of these is a math symbol?
   ○ +
   ○ &
   ○ @