UNIT 7
Geometry

Alaskan Math Standards (GLE's) for This Unit

These Alaskan math standards underly the language development of the unit. Many of these standards are addressed during the regular math program and in the concrete introduction of the key vocabulary words for the unit.

The student demonstrates an understanding of geometric relationships by:

[7] G-1 using the attributes and properties of polygons (diagonals, number of sides and angles) to identify and classify regular or irregular polygons (M5.3.1)

[7] G-2 using the attributes and properties of prisms (vertices, length and alignment of edges, shape and number of bases, shape of faces) to identify and describe triangular or rectangular pyramids (M5.3.2)

The student demonstrates conceptual understanding of similarity, congruence, symmetry, or transformations of shapes by:

[7] G-3 using a scale factor to solve problems involving similar shapes (e.g., scale drawings, maps) (M5.3.3)

[7] G-4 drawing or describing the results of applying transformations such as translations, rotations, reflections, or dilations to figures (L) (M5.3.5)

The student solves problems (including real-world situations) by:

[7] G-5 determining the volume of cubes and rectangular prisms (M5.3.4)

[7] G-6 determining the surface area of rectangular prisms (M5.3.4)

[7] G-7 determining the circumference of a circle (M5.3.4)

Alaskan Language Standards (GLE's) for This Unit

AK.R.3.1. Reading: The student uses strategies to decode or comprehend the meaning of words in texts. (E.B.1)

[7] 3.2.2. Reading aloud short factual information (e.g., reports, articles) (L)

AK.R.3.3. Reading: The student restates/summarizes and connects information. (E.B.3)

AK.R.3.5. Reading: The student follows written directions. (E.C.2)

[7] 3.5.1. Completing a task by following written, multi-step directions (e.g., answer a multi-faceted text question) (L)

[7] 3.5.2. Identifying the sequence of steps in a list of directions (e.g., what is the first step, what is the second step)

[7] 3.3.4. Applying rules of capitalization (e.g., titles and proper nouns)

AK.W.3.4. Writing: The student revises writing. (E.A.5, E.A.8)

AK.E.A. A student should be able to speak and write well for a variety of purposes and audiences. A student who meets the content standard should:

E.A.1. Apply elements of effective writing and speaking. These elements include ideas, organization, vocabulary, sentence structure, and personal style.

E.A.2. In writing, demonstrate skills in sentence and paragraph structure, including grammar, spelling, capitalization, and punctuation.

E.A.3. In speaking, demonstrate skills in volume, intonation, and clarity.

INTRODUCTION OF MATH VOCABULARY

Geometry

Concrete Introduction of Key Vocabulary
Note: *A vocabulary graphic is provided in this unit for each of the key words.*
Definitions for all of the key words can be found in the glossary at the back of this program.

VERTEX

Darken the room. Give two students each a flashlight. Have the students stand diagonally from each other. The students should turn on the flashlights and shine the beams so that they intersect. Use this intersection point to introduce vertex related to a polygon.

VERTICES

Darken the room. Give two students each a flashlight. Have the students stand diagonally from each other. The students should turn on the flashlights and shine the beams so that they intersect. Use this intersection point to introduce vertex related to a polygon.

Introduce the plural form vertices to the students.

PRISM (TRIANGULAR)

Before the lesson begins, cut a box so that it lies flat and has 3 sides. As the students watch, fold two of the sides up, creating a triangular prism. Show the students the tent picture from the back of this unit - use it to reinforce the concept of triangular prisms.

Geometry

Concrete Introduction of Key Vocabulary
Note: *A vocabulary graphic is provided in this unit for each of the key words.*
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EDGE

Use the cut-up box (from the previous page) to introduce edges to the students. Direct their attention to the edges of the prism. Have the students identify other edges in the classroom.

SYMMETRY

Fold a white sheetof paper in half. Use crayons or colored oil pastels to create a design on ONE side of the paper and touching the crease. When finished, re-fold the paper and rub vigorously with the side of a ruler. Open the paper to display the mirror image. Use this to introduce symmetry to the students.

DILATION

Make a small ball of dough using flour and water. Show a packet/jar of yeast and the dough to the students. Have them suggest the effect the yeast would have on the dough, in the process of making bread. Use this to introduce dilation of scale to the students. Cite other examples of dilation (i.e. inflating a balloon, the growth of living things, etc.).

Geometry

Concrete Introduction of Key Vocabulary
Note: *A vocabulary graphic is provided in this unit for each of the key words.*
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PERIMETER

Place a tray of soil in front of the students. Place a toy house on the soil. Have the students suggest how the owner of the house can show the land that he/she owns. The students may suggest a fence--use your finger to create a mock fence around the house. Use this to introduce perimeter to the students. Cite other examples of perimeters, such as clan territories, city boundaries, etc.

RECTANGULAR (PRISM)

Show the students the rectangular prism from the back of this unit. Have the students name the properties of the prism--the number of sides, shapes of the sides, etc. If an actual rectangular pris m is available, show it to the students.
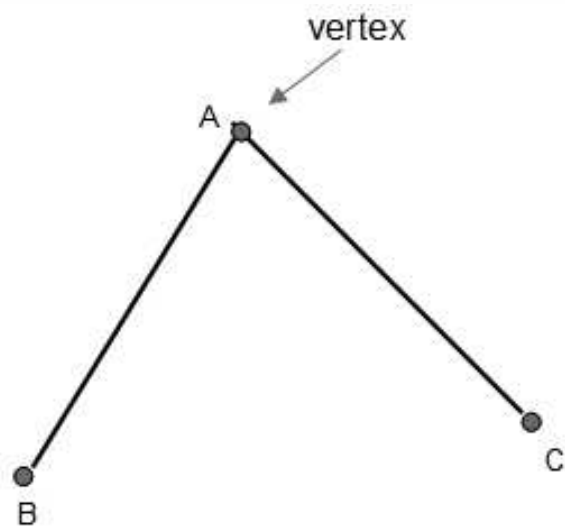
TRAPEZOID

Open a cardboard box and cut it so that it can be folded to represent a trapezoid--two of the sides should be parallel.
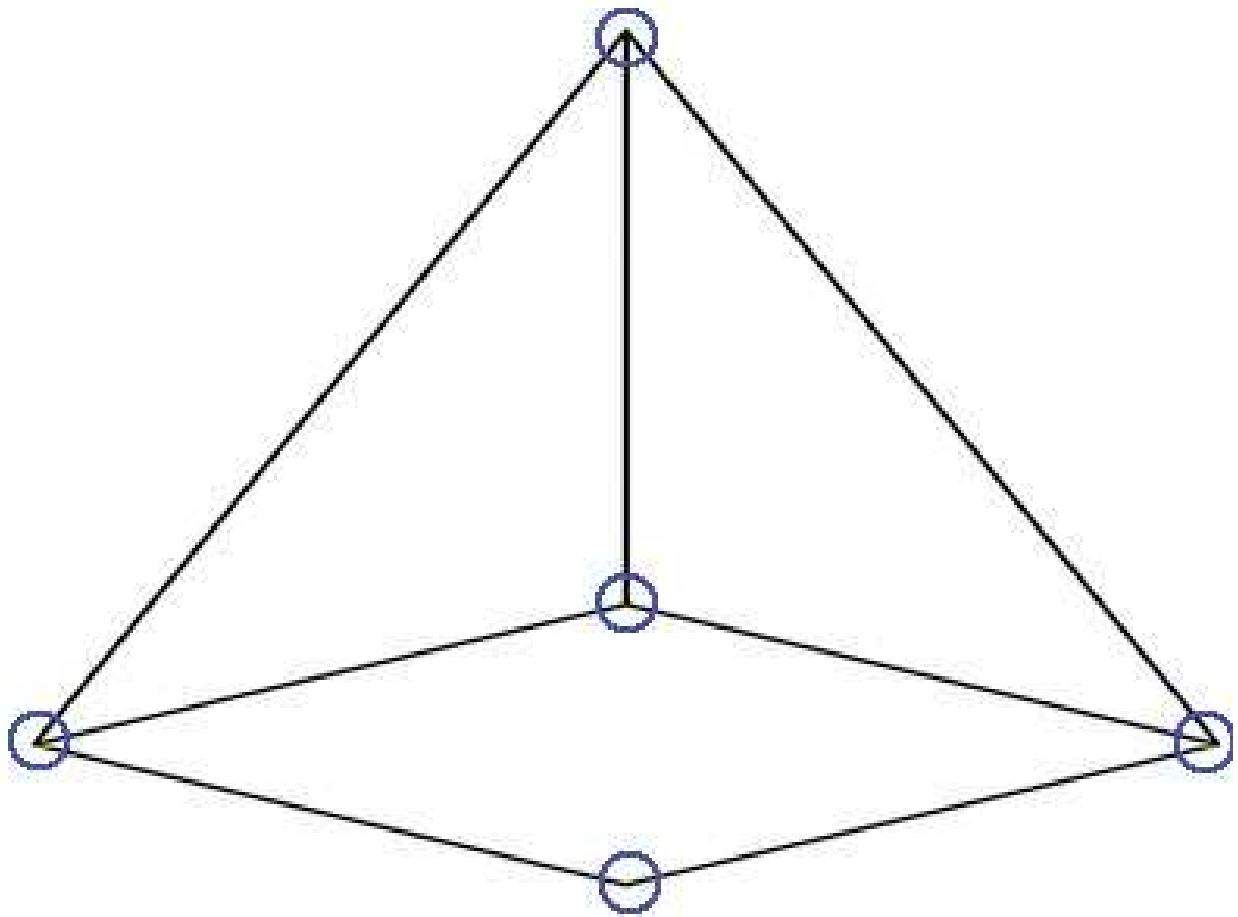
VOCABULARY
PICTURES
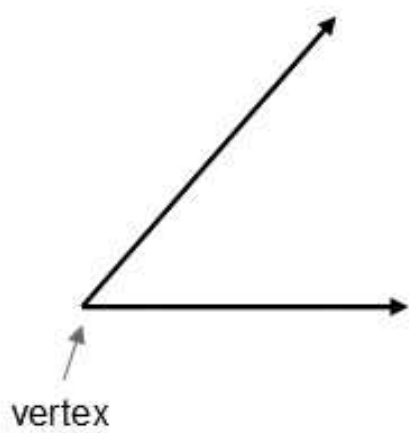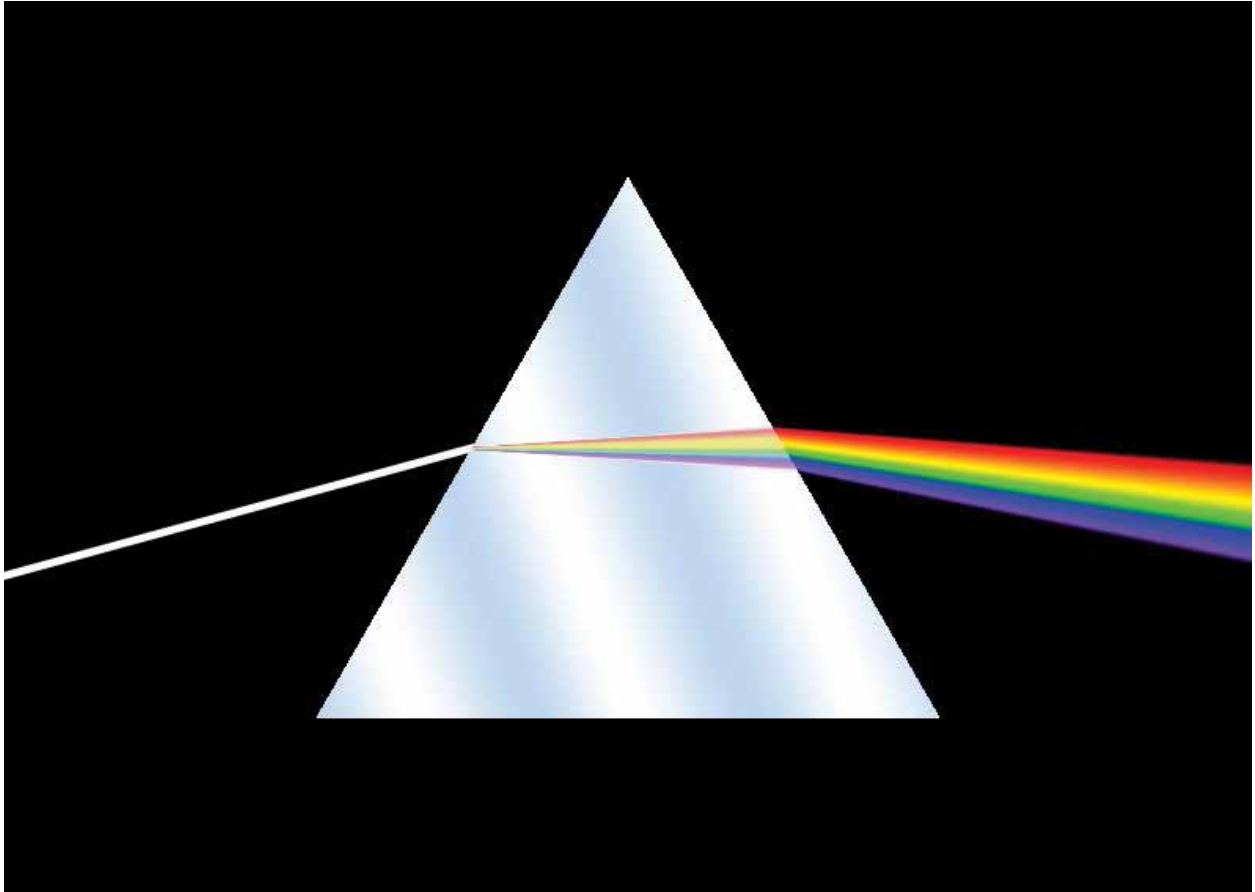
Common point of two rays

Common point of two line segments
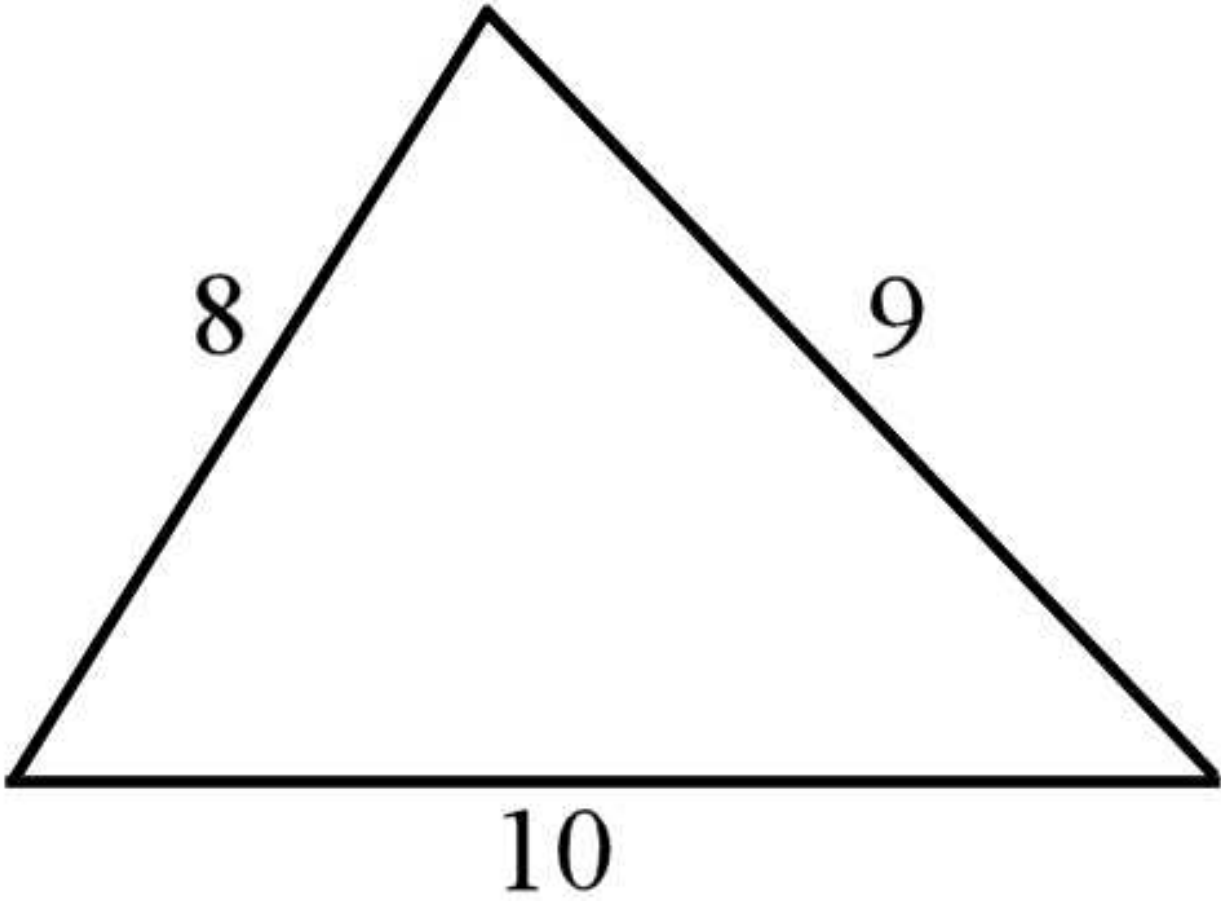
VERTEX

VERTICES

PRISM (TRIANGULAR)

EDGE

SYMMETRY

DILATION

8

9

10

PERIMETER

RECTANGULAR
(PRISM)

TRAPEZOID

LANGUAGE ACTIVITIES

Language and Skills Development

LISTENING

Review the key math words introduced in this unit. If the vocabulary pictures were not presented during the introduction, show them to the students at this time.

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.

Tissue Drop

Group the students in a circle. Stand in the center of the circle with a small piece of tissue paper or an inflated balloon. Give the vocabulary illustration to the students. The students should pass the illustration around the circle in a clockwise direction until you clap your hands. Then, the students should stop passing around the illustration. Toss something like a tissue paper or ball into the center and say a vocabulary word. The student who has the illustration for that word must rush into the circle to catch the object before it hits the floor.

Over and Under

Group the students into two teams. Mount the vocabulary pictures on the board. Give the first player in each team a ball. When you say, "Go," the first player in each team must pass the ball to the next player, over his/her head. The next player must then pass the ball to the third player, between his/her legs. The players should continue with this over/under sequence until the last player in a team receives the ball. When the last player receives the ball, he/she must rush to the board and identify a picture for a vocabulary word that you say. The first player to do this successfully wins the round. Repeat until all players in each team have had a chance to respond in this way.

Roll 'Em Again Sam

Provide each student with two flashcards. Each student should then write a number between 1 and 6 on each of his/her cards — one number per card. When the students' number cards are ready, toss two dice. Call the two numbers showing on the dice. Any student or students who have those two numbers on their number cards must then find a vocabulary graphic you name (you may wish to have the vocabulary graphics mounted on the board and numbered, for easy identification). The students may change number cards after each round of the activity.

Language and Skills Development

Knock Knees

Mount the vocabulary pictures on the board. Group the students into two teams. Give a small, hard ball to the first player in each team. The first player in each team must place the ball between his/her knees. Say a vocabulary word. When you say "Go," the two players must then walk to the pictures without losing the balls. The first player to reach the vocabulary pictures and identify the picture for the word you said wins the round. If a player loses his/her ball, he/she must return to his/her team and begin again. Repeat until all players have played.

Toothpick Pass

Mount the vocabulary graphics on the board and number each graphic. Group the students in a circle. Give each student a toothpick. Place a lifesaver over one or more of the toothpicks. When you say "Go," the students should pass the lifesaver(s) around the circle in a clockwise direction. When you clap your hands, the students should stop passing the lifesaver(s). Say a vocabulary word. The student or students who have the lifesavers must identify the NUMBER of a graphic that describes the word you named. Repeat until many students have responded in this way.

All in Knots

Group the students into two teams. Tie two lengths of rope in a knot (use the same knot for each rope). Skipping ropes are ideal for this activity. Mount the vocabulary graphics on the board. Give a knotted rope to the first player in each team. Say a vocabulary word. When you say "Go," the first player in each team must then attempt to untie the knot he/she has. The first player who unties his/her knot, rushes to the board, and identifies the vocabulary graphic for the word you said, wins the round. Repeat until all players have participated.

Language and Skills Development

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.

The Disappearing Pictures

Mount five or six pictures on the board, vertically. Point to the picture at the top and tell the students to name it. Continue in this way until the students have named all of the pictures from top to bottom. Then, remove the last picture and repeat this process—the students should say all of the vocabulary words, including the name for the "missing" picture. Then, remove another picture from the board and have the students repeat this process. Continue in this way until the students are saying all of the vocabulary words from a blank board or until the students cannot remember the "missing pictures."

Picture Jigsaw

Cut each of the vocabulary pictures into four pieces. Mix the cut out pieces together and distribute them to the students (a student may have more than one picture section). When you say "Go," the students should attempt to match the jigsaw sections they have to reproduce the original vocabulary pictures. When the students put the necessary pieces of a picture together, they should identify the picture by its vocabulary word. Continue until all vocabulary pictures have been put together and named in this way.

Colander

Before the activity begins, obtain a sheet of construction paper equal in size to the size of your vocabulary pictures. Use a single hole punch to punch holes in the sheet. Place the sheet over one of the vocabulary pictures. Hold the sheet and vocabulary picture up so that the students can see them. The students should attempt to identify the vocabulary picture from the parts they can see through the holes in the construction paper. The first student to do this correctly wins the round. This activity may also be done in team form. In this case, the first player to correctly identify the vocabulary picture wins the round.

Language and Skills Development

Illustration Build-Up

Mount the vocabulary illustrations on the chalkboard. Point to two of the illustrations. The students should then say the vocabulary words for those two illustrations. Then, point to another illustration. The students should repeat the first two vocabulary words and then say the vocabulary word for the third illustration you pointed to. Continue in this way until the students lose the sequence of words.

Flip of the Coin

Provide each student with a penny. Keep one penny for yourself. Mount the vocabulary pictures on the board. Have the students (gently) toss their pennies into the air. Each student should look to see which side of his/her penny is face-up. Toss your penny into the air in the same way. Call the side of your penny that is face-up. The students who have the same side of coin face up must then identify (orally) a vocabulary picture you point to. For example, if the heads side of your coin is face up, the students who have heads showing on their coins must then orally identify the vocabulary picture you point to. Repeat this process a number of times.

Number Draw

Provide each student with a blank flashcard. Say a number to each student (between one and the number of students in your class). Each student should write his/her number on his/her number card. Prepare a matching set of number cards and place the cards in a container. Reach into the container and remove one of the number cards. Call the number showing on it. The student who has that number must identify a vocabulary picture on the board (or repeat a sentence that you said at the beginning of the round). Repeat this process until all students have responded.

Language and Skills Development

READING

Introduce the math sight words to the students — match the sight words with the vocabulary graphics. The sight words are included in the Student Support Materials, attached to these lesson plans.

Sight Recognition

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.

String Along

Join all of the students together with string (the students do not need to move from their seats). Before tying the ends of the string together, insert a roll of tape over one of the ends of the string. Tie the ends of the string together. Turn your back to the students. The students should pass the roll of tape along the string as quickly as possible. When you clap your hands, the student left holding the tape must then identify a sight word you show him. Repeat this process until many students have responded and until all of the sight words have been correctly identified a number of times.

Student Support Materials

Have the students complete the sight recognition and encoding activities in the Student Support Materials. When finished, review their work.

Decoding/Encoding

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.

Language and Skills Development

The Lost Syllable

Say a syllable from one of the sight words. Call upon the students to identify the sight word (or words) that contain that syllable. Depending upon the syllable you say, more than one sight word may be the correct answer. This activity may also be done in team form. In this case, lay the sight word cards on the floor. Group the students into two teams. Say a syllable from one of the sight words. When you say "Go," the first player in each team must rush to the sight word cards and find the sight word that contains the syllable you said.

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.

Student Support Materials

Have the students complete the sight recognition and encoding activities in the Student Support Materials. When finished, review their work.

Reading Comprehension

Student Support Materials

Have the students complete the sight recognition and encoding activities in the Student Support Materials. When finished, review their work.

Language and Skills Development

WRITING
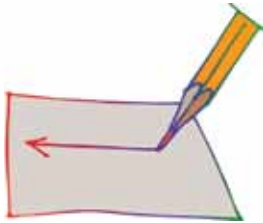
Word Build
Provide each student with writing paper and a pen. Cut each of the sight words into its individual letters. Give each student one of the cut out letters. Each student should then glue the cut out letter onto his/her sheet of writing paper. Then, each student should add the missing letters to complete the original sight word. Afterwards, review the students' responses. You may wish to provide each student with more than one cut out letter so that he/she writes a number of the sight words.

Backwards Spell
Provide each student with writing paper and a pen. Spell one of the sight words, backwards. When you have completed the spelling of the word in this way, each student should then write the word you spelled on his/her sheet of paper, writing the letters of the word in their correct order. The students should not begin to write the word until AFTER you have completed the backwards spelling of the word. Repeat this process with other sight words. This activity may also be done in team form. In this case, group the students into two teams. Spell one of the sight words backwards. When you say "Go," the first player from each team must rush to the chalkboard and write the word that you said - writing the letters of the word in their correct sequence. The first player to do this correctly wins the round. Repeat until all players have participated.

What's Missing?
Before the activity begins, prepare a page that contains clozure sentences - the sight words having been left out. Provide each student with a copy of the page. The students should read the clozure sentences carefully and then each student should write the vocabulary words in the sentences. This activity may also be done in team form. In this case, write a clozure sentence on the chalkboard (omitting the sight word or words). Group the students into two teams. When you say "Go," the first player from each team must rush to the chalkboard and write the sight word(s) on the chalkboard that complete the sentence correctly. The first player to do this wins the round. Repeat until all players have had a chance to participate.

Language and Skills Development

Word Descriptions

Mount the sight words on the chalkboard. Provide the students with writing paper and pens. Then, describe the features of one of the sight words. This may include the number of letters, syllables, etc. After describing the features of the sight word, each student should write the sight word he/she feels fits the description you gave. Repeat this process with other sight words. Afterwards, review the students' responses.

Student Support Materials

Have the students complete the sight recognition and encoding activities in the Student Support Materials. When finished, review their work.

STUDENT SUPPORT MATERIALS

Listening ● **Mini Pictures**

Listening: Mini Pictures
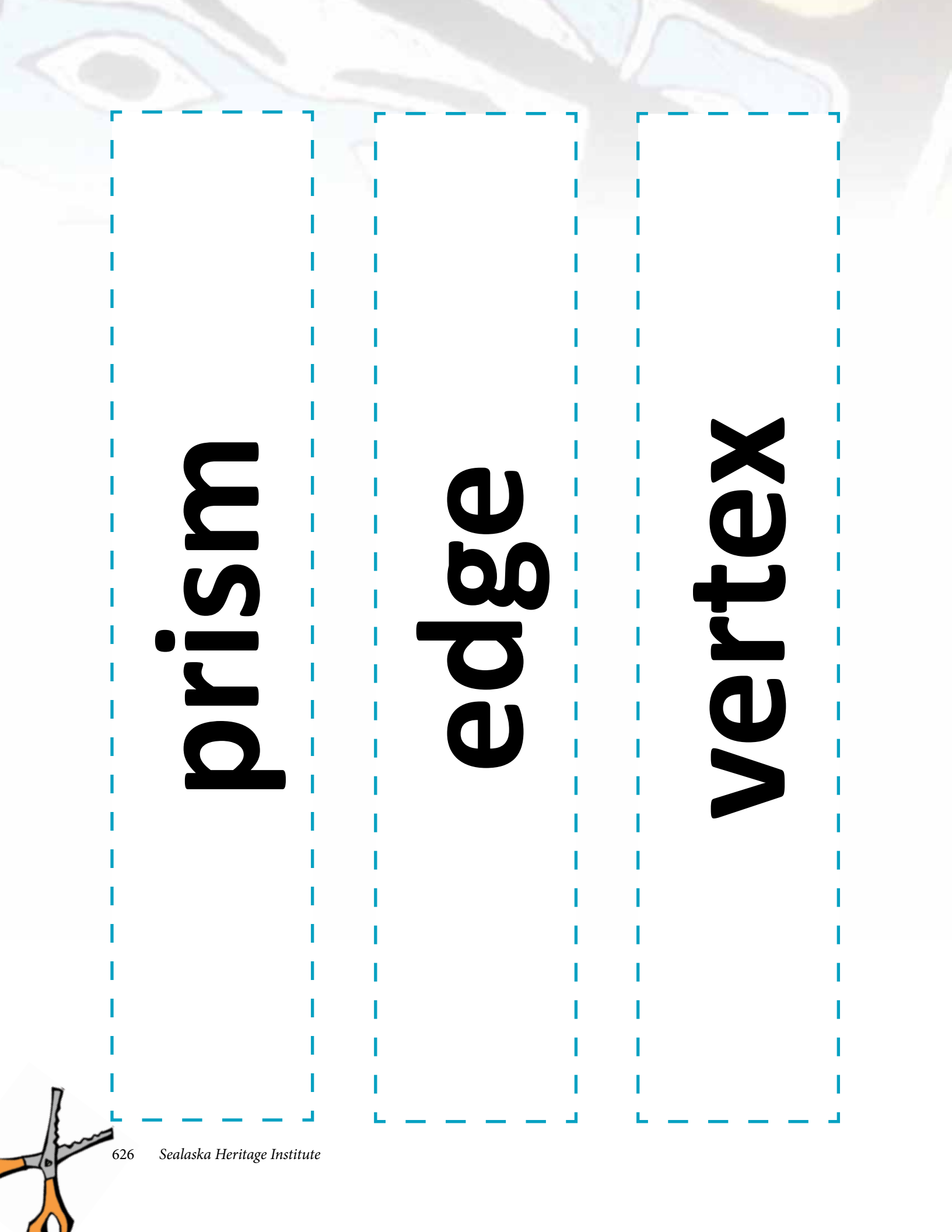
Have the students cut out the pictures. Say the key math words from this unit, and the students should hold up the pictures for them.
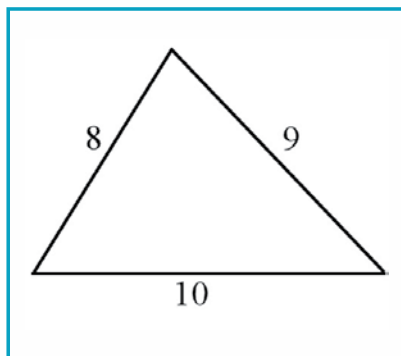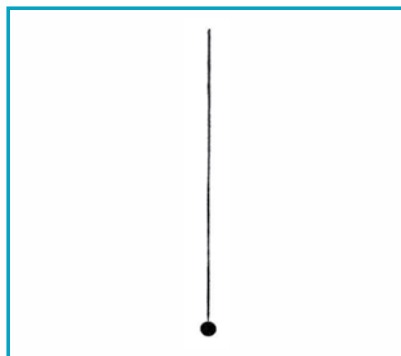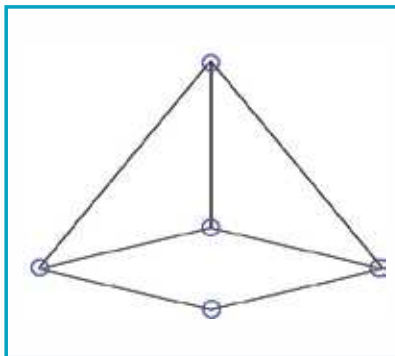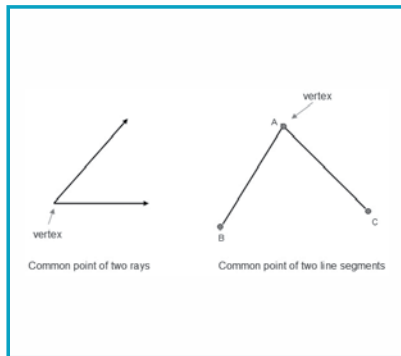
STUDENT SUPPORT MATERIALS

Sight Words
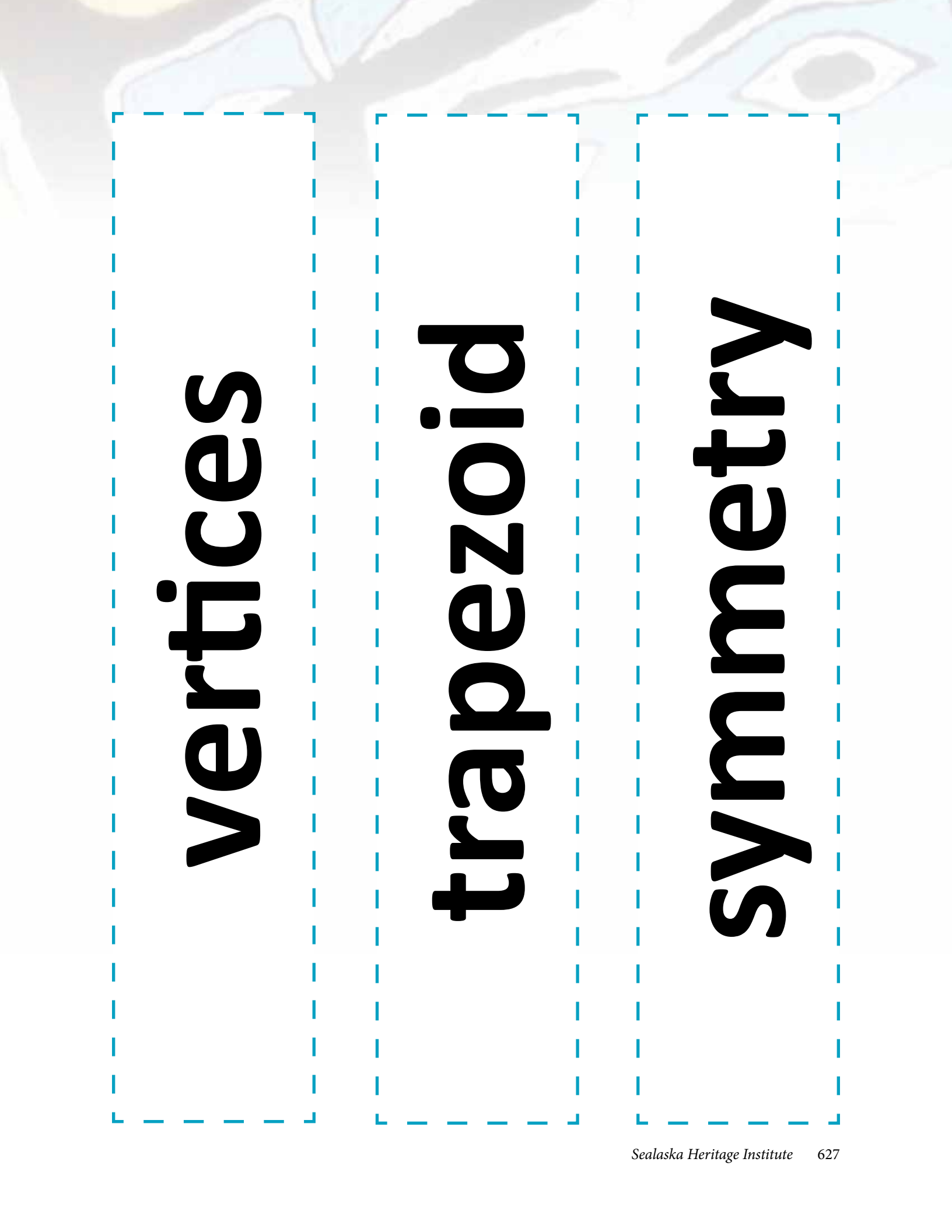
prism

edge

vertex
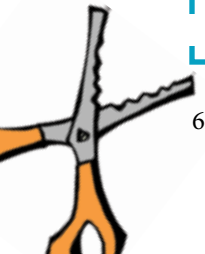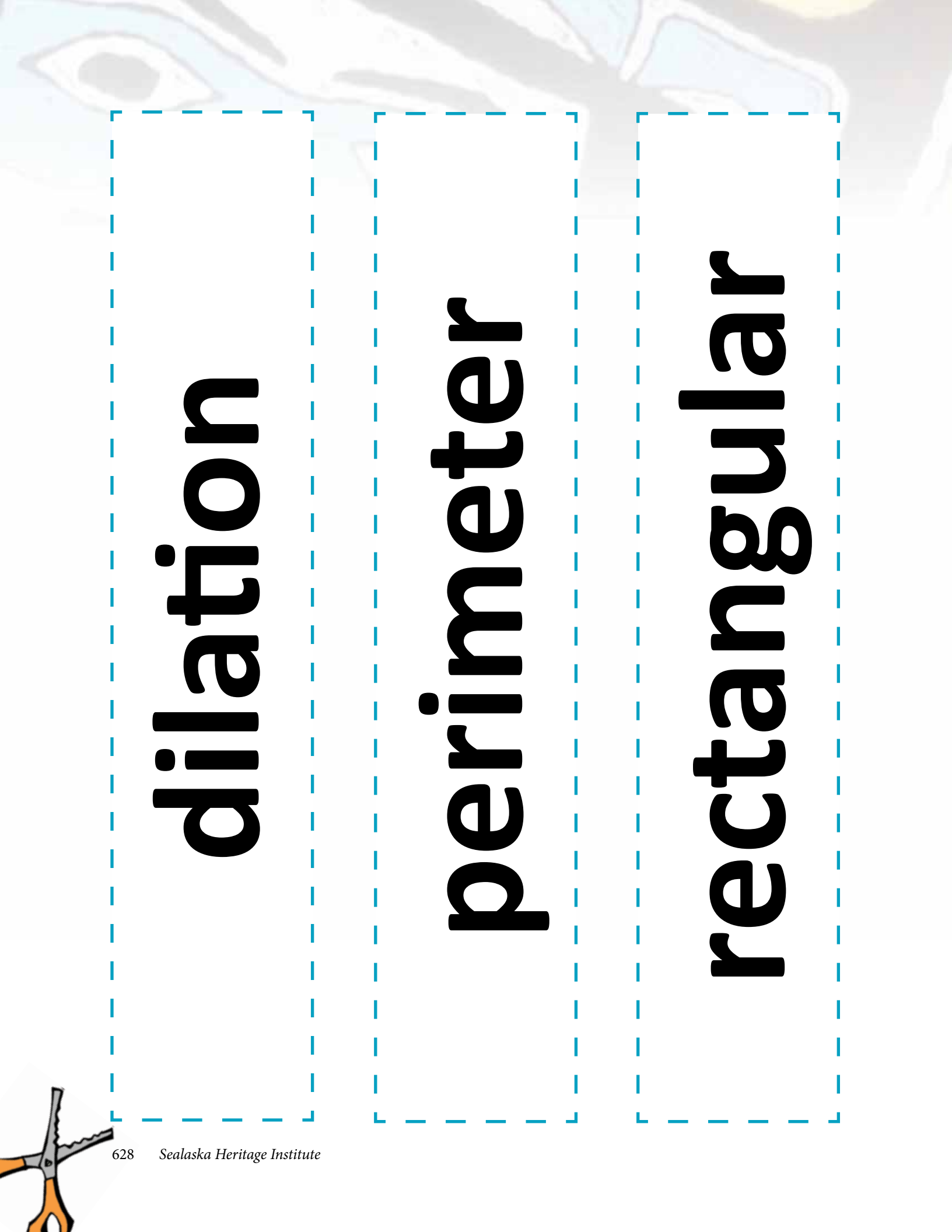
vertices

trapezoid

symmetry

dilation

perimeter

rectangular

STUDENT SUPPORT MATERIALS
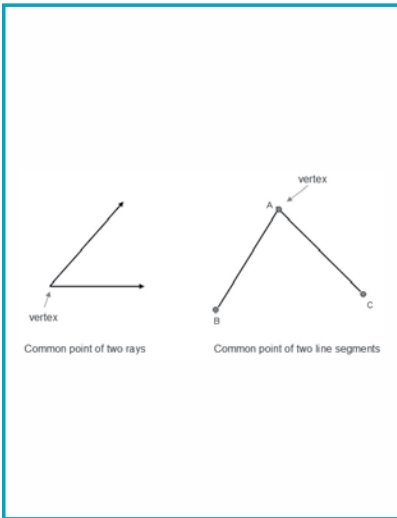
Reading • **Sight Recognition**

Sight Words Activity Page

Have the students circle the word for each picture.

prism
edge
vertex
vertices
trapezoid
symmetry
dilation
perimeter
rectangular

prism
edge
vertex
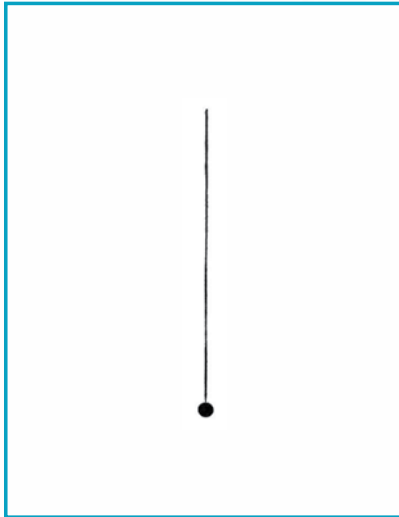vertices
trapezoid
symmetry
dilation
perimeter
rectangular

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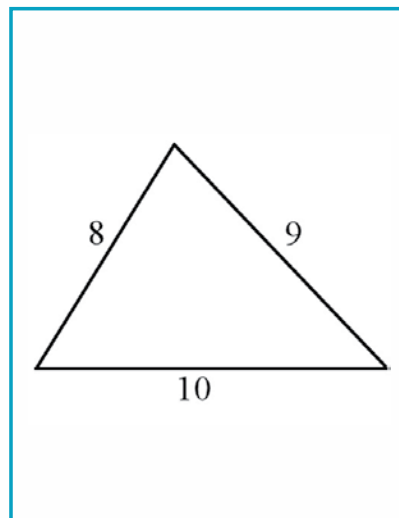
prism
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prism
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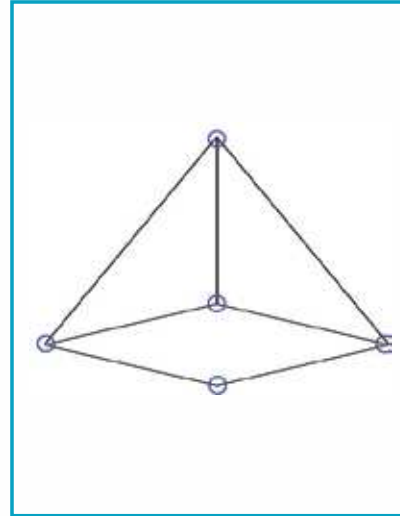vertex
vertices
trapezoid
symmetry
dilation
perimeter
rectangular

prism
edge
vertex
vertices
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dilation
perimeter
rectangular

Sight Words Activity Page

prism
edge
vertex
vertices
trapezoid
symmetry
dilation
perimeter
rectangular

prism
edge
vertex
vertices
trapezoid
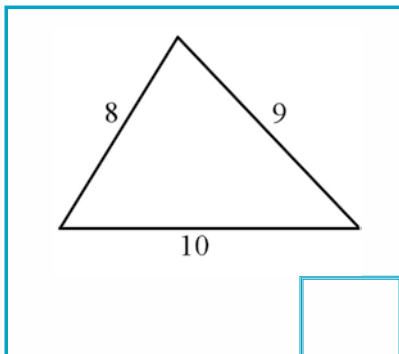symmetry
dilation
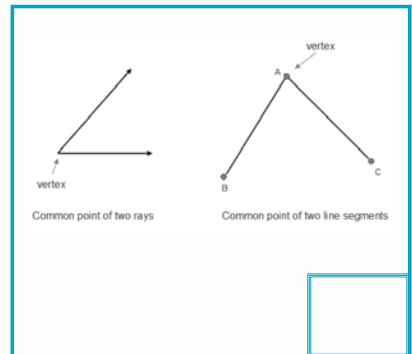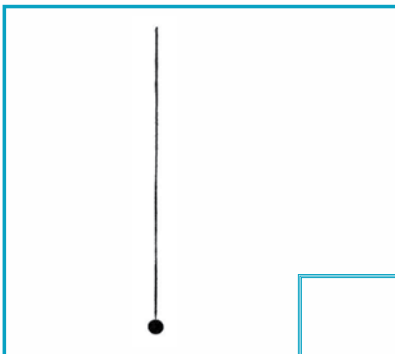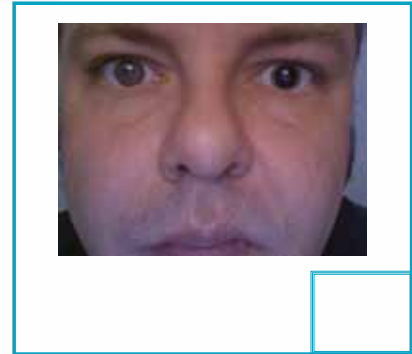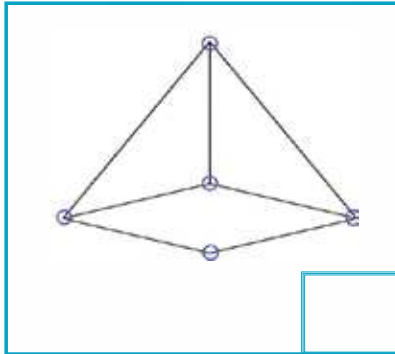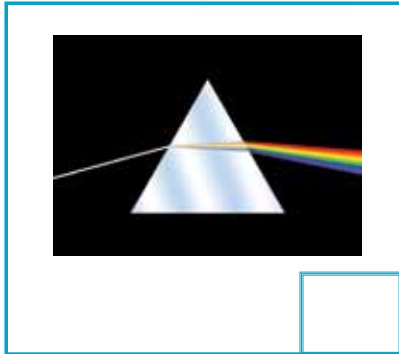perimeter
rectangular

prism
edge
vertex
vertices
trapezoid
symmetry
dilation
perimeter
rectangular

Sight Words Activity Page

Write the numbers on their correct vocabulary graphics.

1. **prism**   6. **symmetry**
2. **edge**   7. **dilation**
3. **vertex**   8. **perimeter**
4. **vertices**   9. **rectangular**
5. **trapezoid**

Sight Words Activity Page

Write the key words from this unit horizontally in the boxes (more than one copy of each word can be written). Fill in all other boxes with any letters. Exchange page with another student. Find key words and circle.

Sight Words Activity Page

Highlight or circle the words in this word find.

prism	trapezoid	symmetry
perimeter	vertices	rectangular
dilation	vertex	edge

```
i  r  a  r  e  c  t  a  n  g  u  l  a  r  y  l  r  r
m  e  d  g  e  c  t  r  a  p  e  z  o  i  d  m  l  t
p  r  i  s  m  t  r  a  p  e  z  m  d  i  d  o  t  m
i  a  z  r  p  r  i  s  m  t  s  y  m  m  e  t  e  a
e  i  e  l  l  i  g  x  e  e  z  s  x  t  r  e  e  d
d  e  o  o  r  e  e  m  a  t  v  e  r  t  i  c  e  s
v  d  i  l  a  t  i  o  s  v  m  y  y  r  l  r  l  i
p  t  l  c  v  e  r  t  i  e  p  e  n  s  o  e  r  r
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g  d  v  e  v  e  r  t  c  p  e  m  i  i  p  t  d  e
r  e  c  t  a  n  g  u  l  a  a  t  e  i  e  d  n  s
e  m  i  e  v  i  c  e  d  y  d  i  l  a  t  i  o  n
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i  t  i  t  d  o  a  i  c  i  e  g  u  e  i  r  c  t
r  r  s  z  r  m  p  z  p  a  c  m  d  d  t  r  i  x
a  c  i  e  u  t  t  e  y  n  r  e  g  a  a  p  e  c
```

Sight Words Activity Page

prism	trapezoid	symmetry
perimeter	vertices	rectangular
dilation	vertex	edge

i r a **r e c t a n g u l a r** y l r r

m **e d g e** c **t r a p e z o i d** m l t

p r i s m t r a p e z m d i d o t m

i a z r **p r i s m** t s y m m e t e a

e i e l l i g x e e z s x t r e e d

d e o o r e e m a t **v e r t i c e s**

v d i l a t i o s v m y y r l r l i

p t l c v e r t i e p e n s o e r r

s y m m e t r y s r **v e r t e x** e t

g d v e v e r t c p e m i i p t d e

r e c t a n g u l a a t e i e d n s

e m i e v i c e d y **d i l a t i o n**

t z c e i a m e t e s v e g g e l r

v r a t e d p y y o c i e t e e y r

y i e d t r r m e i e r p g d p r r

z **p e r i m e t e r** a e d e e n e r

d r y r n r e e p e r i m e t e r n

i t i t d o a i c i e g u e i r c t

r r s z r m p z p a c m d d t r i x

a c i e u t t e y n r e g a a p e c

STUDENT SUPPORT MATERIALS

Reading ● **Encoding**

Encoding Activity Page

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

_____ism

ed_____

ver_____

ver_____ces

trapez_____d

mm	ti	oi

ge	tex

sy_____etry

di_____tion

peri_____ter

rectangu_____

pr	la
lar	me

Encoding Activity Page

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

pr	**ge**
ed	**tices**
ver	**lation**
ver	**meter**
trape	**ism**

Encoding Activity Page

sym	**zoid**
di	**ular**
peri	**tex**
rectang	**metry**

Encoding Activity Page

Cut out and encode the syllables of the words OR number the syllables in their correct sequence.

u	rec	tang	lar
____	____	____	____

ter	pe	me	ri
____	____	____	____

zoid	tra	pe
____	____	____

ver | ces | ti

_____ _____ _____

STUDENT SUPPORT MATERIALS

Reading Comprehension

What's the Answer?

Read the text and then select the correct answer for it. Fill in the bullet beside the answer of your choice.

1 A triangular prism
- ○ is a solid object that has one end and A all flat sides.
- ○ is a solid object that has irregular sides and irregular ends.
- ○ is a solid object that has two identical ends and all flat sides.
- ○ is a solid object that has different dimensions at both ends.

2 The edge is
- ○ the line where two surfaces meet.
- ○ the radius of a polygon.
- ○ the scale of an average area.
- ○ the diameter of a polyhedron.

3 A vertex is
- ○ the radius of a circle.
- ○ a point where two or more straight lines meet.
- ○ a point where a congruent shape is on a diagonal.
- ○ the diameter of a circle.

4 Corners of polygons are
- ○ whole numbers.
- ○ circumference.
- ○ vertices.
- ○ irregular.

5 A trapezoid is a
- ○ pattern made from functions and congruent shapes.
- ○ quadrilateral with one pair of opposite sides parallel.
- ○ shape that has no opposite sides.
- ○ triangle with one pair of opposite sides.

6 Symmetry is when
- ○ a shape dilates and its ratio changes.
- ○ one shape is regular and the other is irregular.
- ○ an ordered pair is part of a formula.
- ○ one shape becomes exactly like another if you flip, slide or turn it.

What's the Answer?

7 Dilation is when something gets
- ○ displayed.
- ○ bigger.
- ○ smaller.
- ○ rules.

8 The perimeter of a circle is called the
- ○ parentheses.
- ○ vertex.
- ○ degree.
- ○ circumference.

9 A rectangular prism is a
- ○ circle with a big diameter.
- ○ polyhedron that has six sides that are rectangles.
- ○ polygon that has six sides.
- ○ diagonal line found inside a shape.

What's the Answer?

1 A triangular prism
- ○ is a solid object that has one end and A all flat sides.
- ○ is a solid object that has irregular sides and irregular ends.
- ● is a solid object that has two identical ends and all flat sides.
- ○ is a solid object that has different dimensions at both ends.

2 The edge is
- ○ the line where two surfaces meet.
- ● the radius of a polygon.
- ○ the scale of an average area.
- ○ the diameter of a polyhedron.

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- ○ the radius of a circle.
- ○ a point where two or more straight lines meet.
- ● a point where a congruent shape is on a diagonal.
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What's the Answer?

(7) Dilation is when something gets
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- ○ bigger.
- ● smaller.
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- ● parentheses.
- ○ vertex.
- ○ degree.
- ○ circumference.

(9) A rectangular prism is a
- ○ circle with a big diameter.
- ● polyhedron that has six sides that are rectangles.
- ○ polygon that has six sides.
- ○ diagonal line found inside a shape.

Reading Comprehension Activity Page

Write the numbers/letters for sentence halves that match.

1 In a triangular prism

2 The circumference of a circle

3 A vertex is where

4 More than one vertex is

5 A trapezoid is a quadrilateral with

6 Flipping a shape over can

7 Dilation is when

8 The line where 2 surfaces meet is

9 A rectangular prism has

A called vertices.

B called vertices.

C a figure gets bigger.

D an edge.

E two or more lines meet.

F can be called its perimeter.

G produce symmetry.

H the cross section is the same all along its length.

I six faces or sides.

1→_____   2→_____   3→_____   4→_____

5→_____   6→_____   7→_____   8→_____

9→_____

Reading Comprehension Activity Page

1   In a triangular prism

A   called vertices.

2   The circumference of a circle

B   called vertices.

3   A vertex is where

C   a figure gets bigger.

4   More than one vertex is

D   an edge.

5   A trapezoid is a quadrilateral with

E   two or more lines meet.

6   Flipping a shape over can

F   can be called its perimeter.

7   Dilation is when

G   produce symmetry.

8   The line where 2 surfaces meet is

H   the cross section is the same all along its length.

9   A rectangular prism has

I   six faces or sides.

1→ H   2→ F   3→ E   4→ A

5→ B   6→ G   7→ C   8→ D

9→ I

Reading Comprehension Activity Page

Cut out the words and glue them under their definitions.

This is triangular and has two ends that are the same.	This is the line where two surfaces meet.	This is a point where two or more lines meet.
These can be the corners of polygons.	This is a quadrilateral with two opposite sides that are parallel.	This can relate to "mirror" imaging.
This relates to something that gets bigger.	This is the distance around two dimensional shapes.	This prism has six sides or faces.

vertex   trapezoid   dilation   edge

vertices   perimeter   symmetry

prism   rectangular

Reading Comprehension Activity Page

This is triangular and has two ends that are the same.	This is the line where two surfaces meet.	This is a point where two or more lines meet.
prism	edge	vertex
These can be the corners of polygons.	This is a quadrilateral with two opposite sides that are parallel.	This can relate to "mirror" imaging.
vertices	trapezoid	symmetry
This relates to something that gets bigger.	This is the distance around two dimensional shapes.	This prism as six sides or faces.
dilation	perimeter	rectangular

STUDENT SUPPORT MATERIALS

Writing

Writing Activity Page

Have the students complete the writing of the key math words.
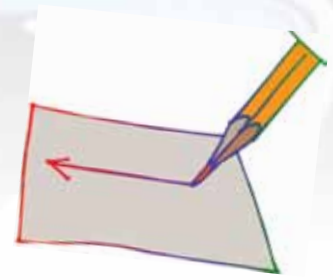
_____ism

ed_____

ver_____x

ver_____ces

trapez_____d

sy_____etry

di_____tion

peri_____ter

rectang_____ar

Writing Activity Page

Have the students complete the writing of the key math words.
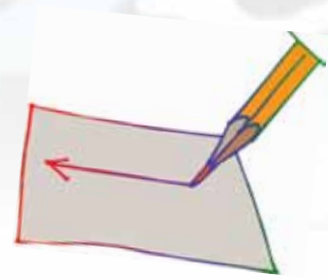
p_____m

e_____e

v_____x

v_____es

tr_____d

sy_____y

di_____n

p_____er

r_____ar

Basic Writing Activity Page

Have the students write the word for each picture.

_____

_____

_____

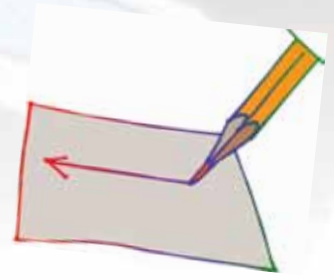

_____

_____

_____
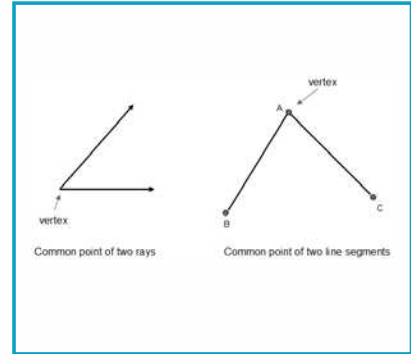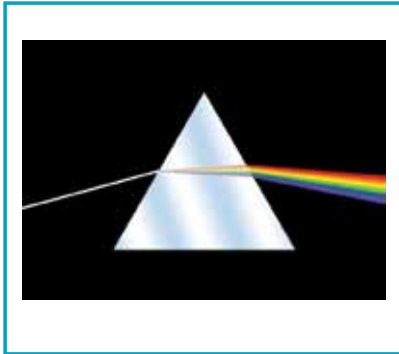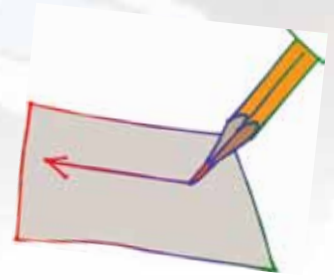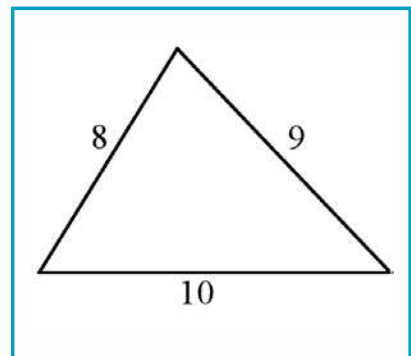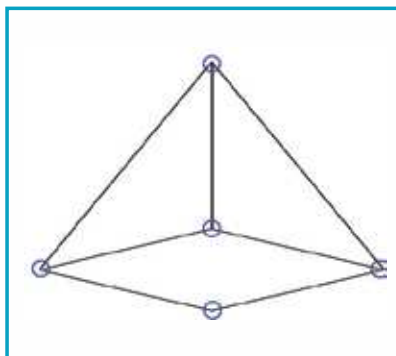
Basic Writing Activity Page

Have the students write the word for each picture.
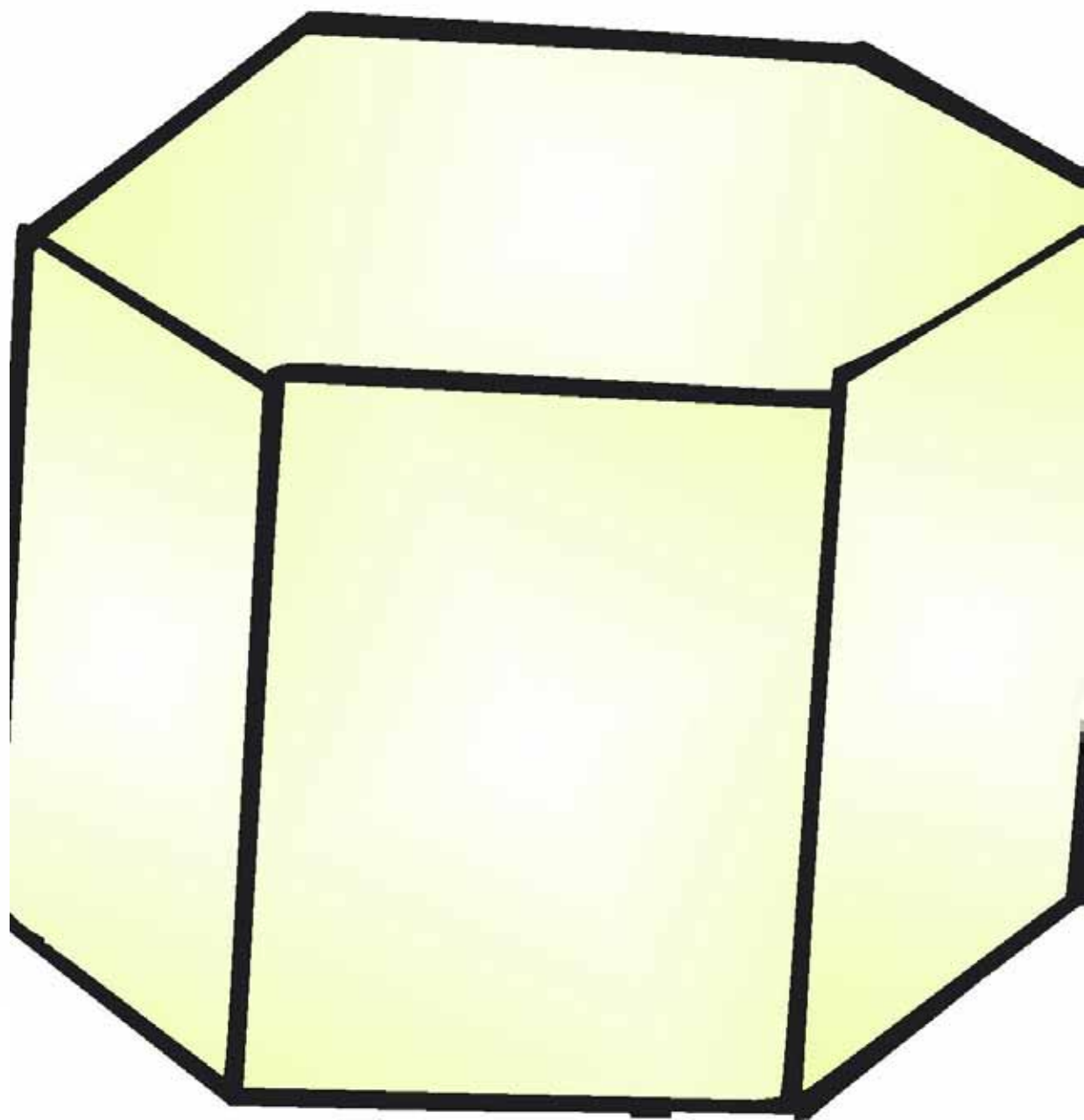

_____ _____ _____
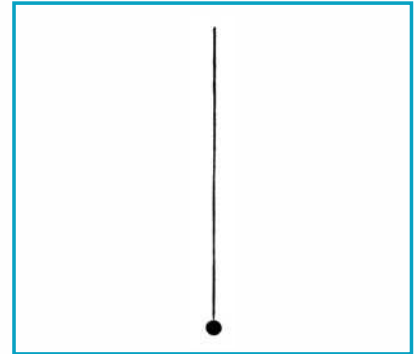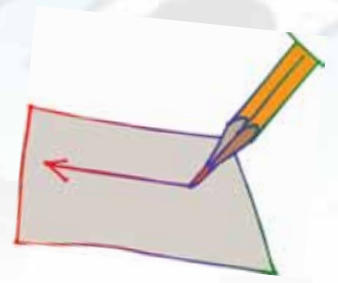
Crossword Puzzle
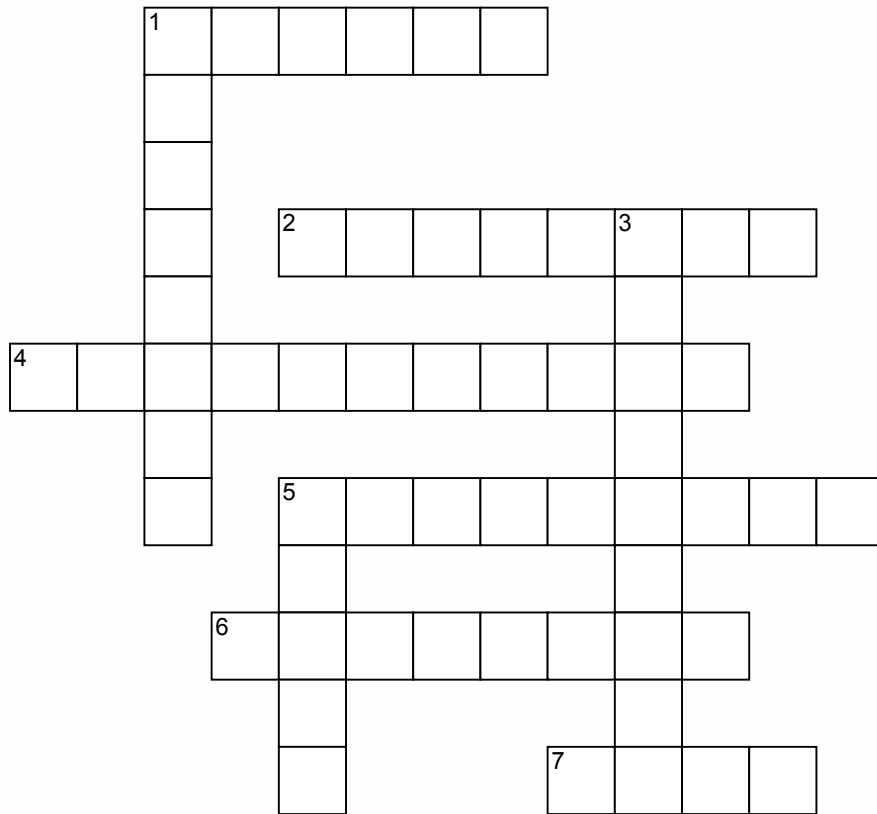
ACROSS

1 This is a point where two or more lines meet.
2 This can relate to "mirror" imaging.
4 This prism has 6 sides or faces.
5 This is the distance around two dimensional shapes.
6 This relates to something that gets bigger.
7 This is the line where two surfaces meet.

DOWN

1 These can be the corners of polygons.
3 This is a quadrilateral with two opposite sides that are parallel.
5 This is triangular and has two ends that are the same.

Crossword Puzzle Answers

```
            V   E   R   T   E   X
            E
            R
            T       S   Y   M   M   E   T   R   Y
            I                           R
    R   E   C   T   A   N   G   U   L   A   R
            E                           P
            S       P   E   R   I   M   E   T   E   R
                    R                   Z
                D   I   L   A   T   I   O   N
                    S                   I
                    M           E   D   G   E
```

UNIT ASSESSMENT

GEOMETRY

Unit Assessment Teacher's Notes
Grade 7 ● Unit 7
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 by the picture for **PRISM**.

2. Write the number 2 by the picture for **EDGE**.

3. Write the number 3 by the picture for **VERTEX**.

4. Write the number 4 by the picture for **VERTICES**.

5. Write the number 5 by the picture for **TRAPEZOID**.

6. Write the number 6 by the picture for **SYMMETRY**.

7. Write the number 7 by the picture for **DILATION**.

8. Write the number 8 by the picture for **PERIMETER**.

9. Write the number 9 by the picture for **RECTANGULAR**.

SIGHT RECOGNITION

Turn to page 2 and 3 in your test. Look at the pictures in the boxes. Circle the word for each picture.

DECODING/ENCODING

Turn to page 4 and 5 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 6 in your test. Write each word under its definition.
Refer to Student Support Materials for answer key.

BASIC WRITING

Turn to page 7 in your test. Look at the pictures in the boxes. Write the word for each picture.

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.
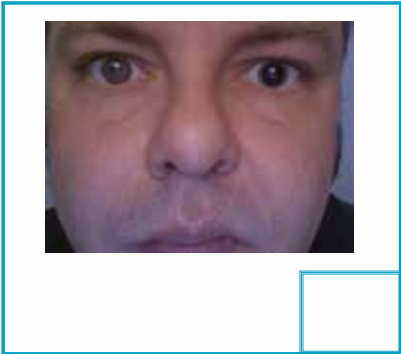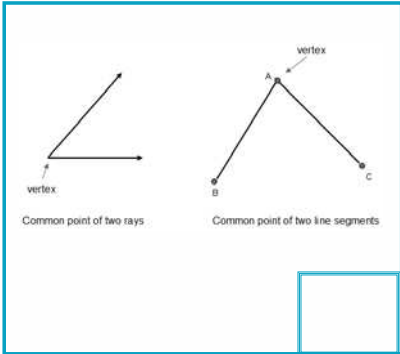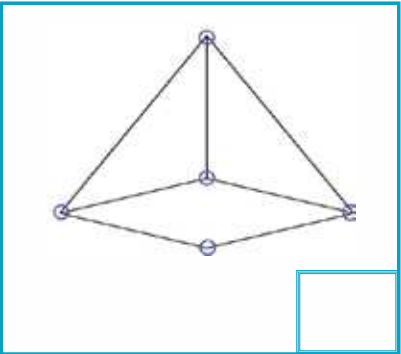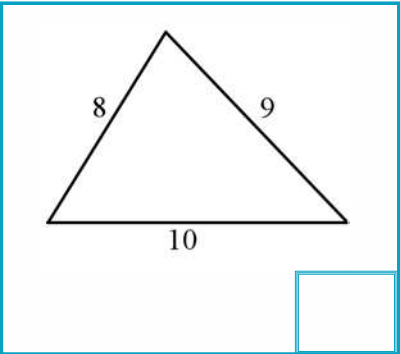
MATH PROGRAM

Unit Assessment Student Pages
Grade 7   ●   Unit 7

Date:_____   **Student's Name:_____**

Number Correct:_____   **Percent Correct:_____**

prism
edge
vertex
vertices
trapezoid
symmetry
dilation
perimeter
rectangular

prism
edge
vertex
vertices
trapezoid
symmetry
dilation
perimeter
rectangular

8
9
10

prism
edge
vertex
vertices
trapezoid
symmetry
dilation
perimeter
rectangular

vertex
vertex
A
B
C
Common point of two rays
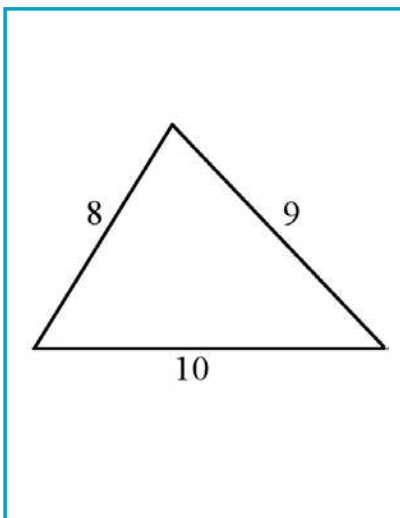Common point of two line segments

prism
edge
vertex
vertices
trapezoid
symmetry
dilation
perimeter
rectangular

prism
edge
vertex
vertices
trapezoid
symmetry
dilation
perimeter
rectangular

prism
edge
vertex
vertices
trapezoid
symmetry
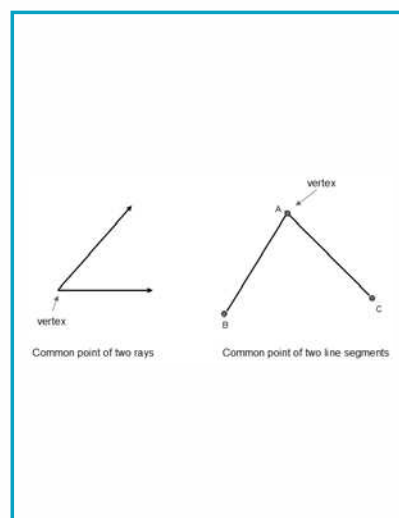dilation
perimeter
rectangular

2

prism
edge
vertex
vertices
trapezoid
symmetry
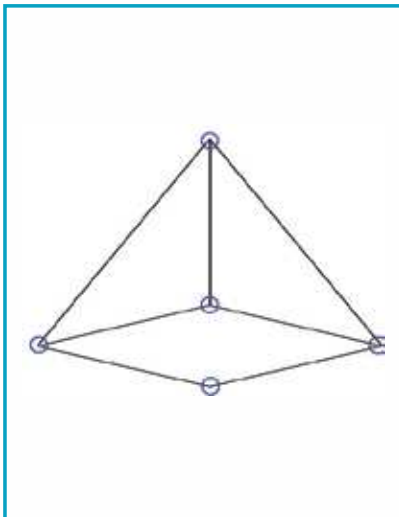dilation
perimeter
rectangular

prism
edge
vertex
vertices
trapezoid
symmetry
dilation
perimeter
rectangular

prism
edge
vertex
vertices
trapezoid
symmetry
dilation
perimeter
rectangular

verti		dila	
	sm		sm
	ge		ge
	tex		tex
	ces		ces
	zoid		zoid
	metry		metry
	tion		tion
	meter		meter
	ular		ular

peri		trape	
	sm		sm
	ge		ge
	tex		tex
	ces		ces
	zoid		zoid
	metry		metry
	tion		tion
	meter		meter
	ular		ular

rectang		sym	
	sm		sm
	ge		ge
	tex		tex
	ces		ces
	zoid		zoid
	metry		metry
	tion		tion
	meter		meter
	ular		ular

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zoid
metry
tion
meter
ular

pri

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meter
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metry
tion
meter
ular

This is triangular and has two ends that are the same.	This is the line where two surfaces meet.	This is a point where two or more lines meet.
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This relates to something that gets bigger.	This is the distance around two dimensional shapes.	This prism as six sides or faces.

edge	vertex	vertices	trapezoid
dilation	symmetry	perimeter	prism
rectangular			

8   9

10

vertex

vertex

Common point of two rays   Common point of two line segments