UNIT 8

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.*

SCALENE

Lay white flour on a portion of black paper. Use your finger to create the* isosceles, equilateral, *and* scalene *triangles.

(continued below)

ISOSCELES

Provide the students with lengths of yarn or string. Have them practice making the* isosceles, equilateral, *and* scalene *triangles, using the yarn or string.

(continued below)

EQUILATERAL

***Use a flashlight to* draw *the different triangles on a wall. After* drawing *a triangle with the light of the flashlight, call upon the students to identify it by its type* (isosceles, scalene, or equilateral).

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.*

ACUTE

Introduce* right, acute, *and* obtuse angles *using the yarn/string.

(continued below)

OBTUSE

Provide each student with a pipe cleaner. Create an* angle *using your string/yarn; the students must then create the same* angle *using their pipe cleaners. Repeat the names of the* angles *many times.

(continued below)

RIGHT

Direct the students' attention to* angles *in the classroom — e.g., window frames, door, etc. Attempt to locate samples of the different* angles *in the room.

Have two students stand — name one of the* angles*; the two students should lay on the floor to create that* angle*. Repeat, with other pairs of students.

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.*

END POINTS

Obtain a length of rope. Have two students hold the rope at the front of the class to represent a* clothesline. *Draw the students' attention to the* ends *of the clothesline; use this to introduce* end points *tothe students.

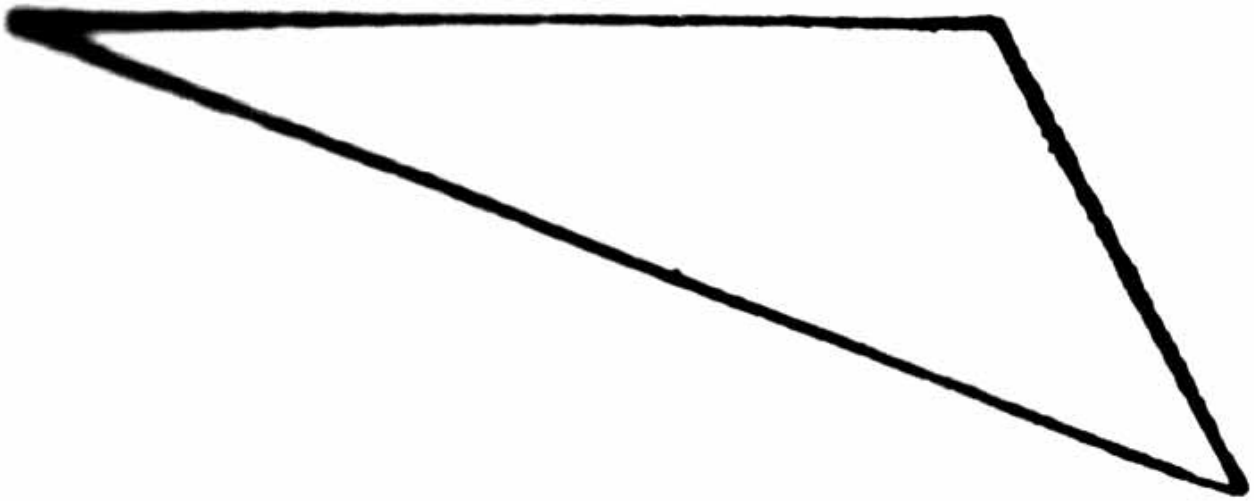
QUADRILATERAL

Collect a variety of photographs of different sizes. Mix all of the pictures together and lay them out in front of the students. Have the students tell what is the same about all of the pictures. Lead them to suggest that all of the pictures have four straight sides.

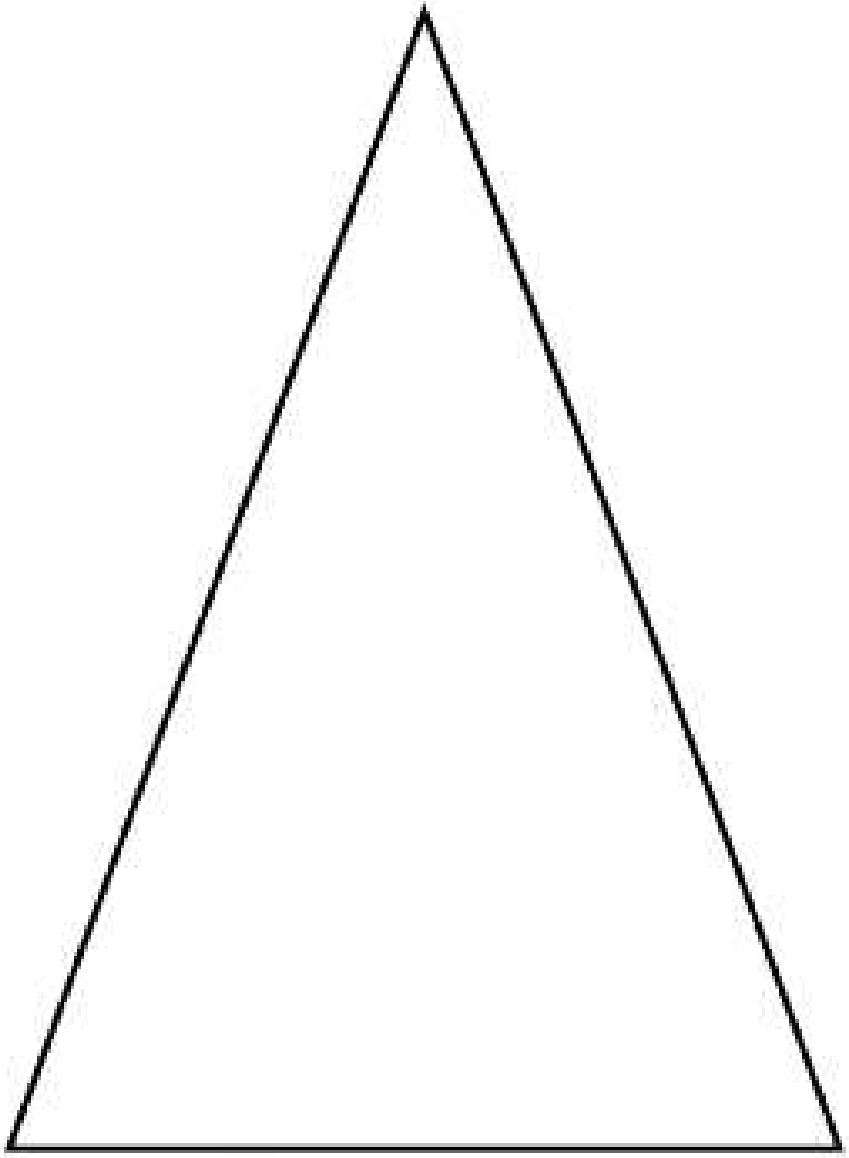
PYRAMID

Show the students the picture of the* human pyramid *from the back of this unit. Relate this to the picture of the* pyramid, *also at the back of this unit. Use moist soil on a tray to create a pyramid as the students watch. Direct their attention to the* base, sides, *and* edges *of the triangle.

VOCABULARY PICTURES



SCALENE



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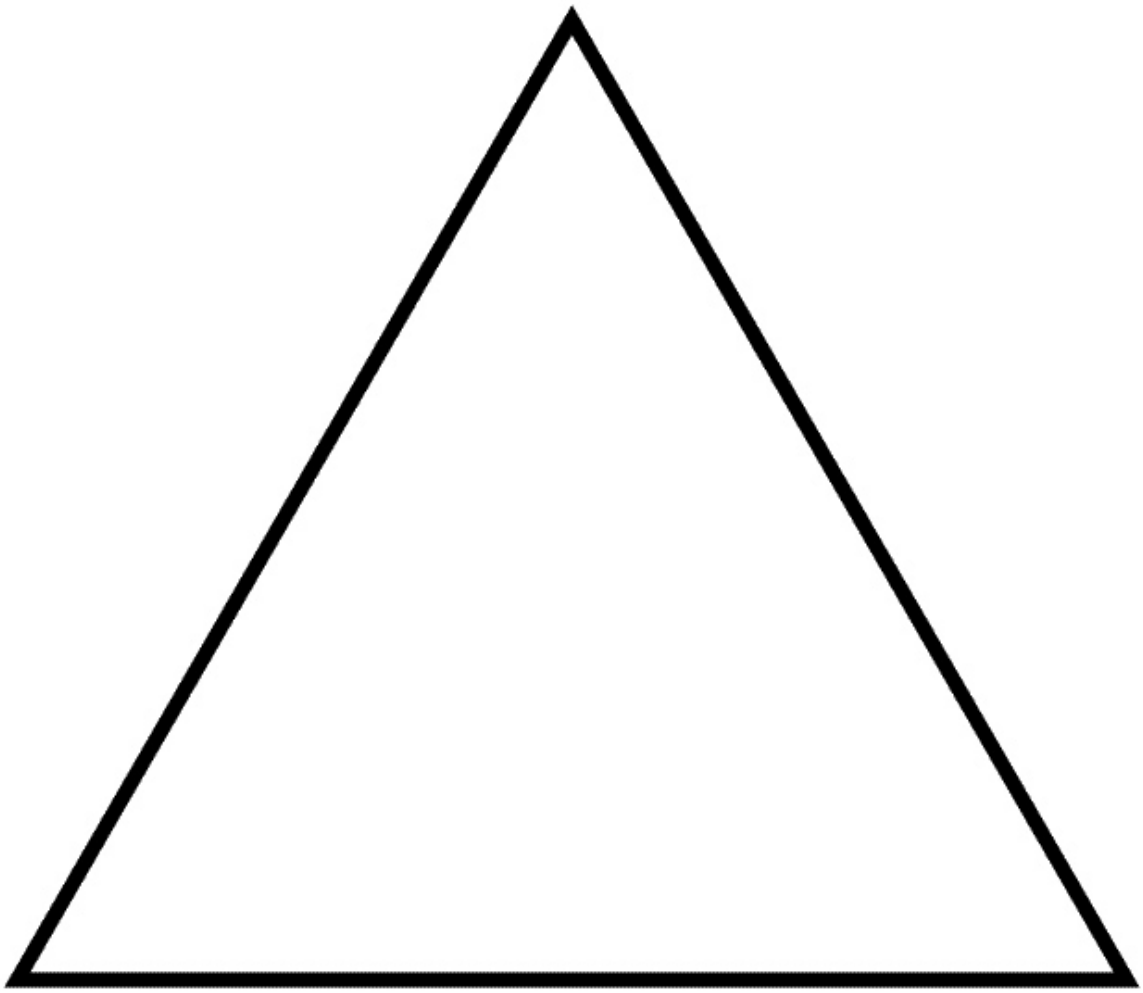
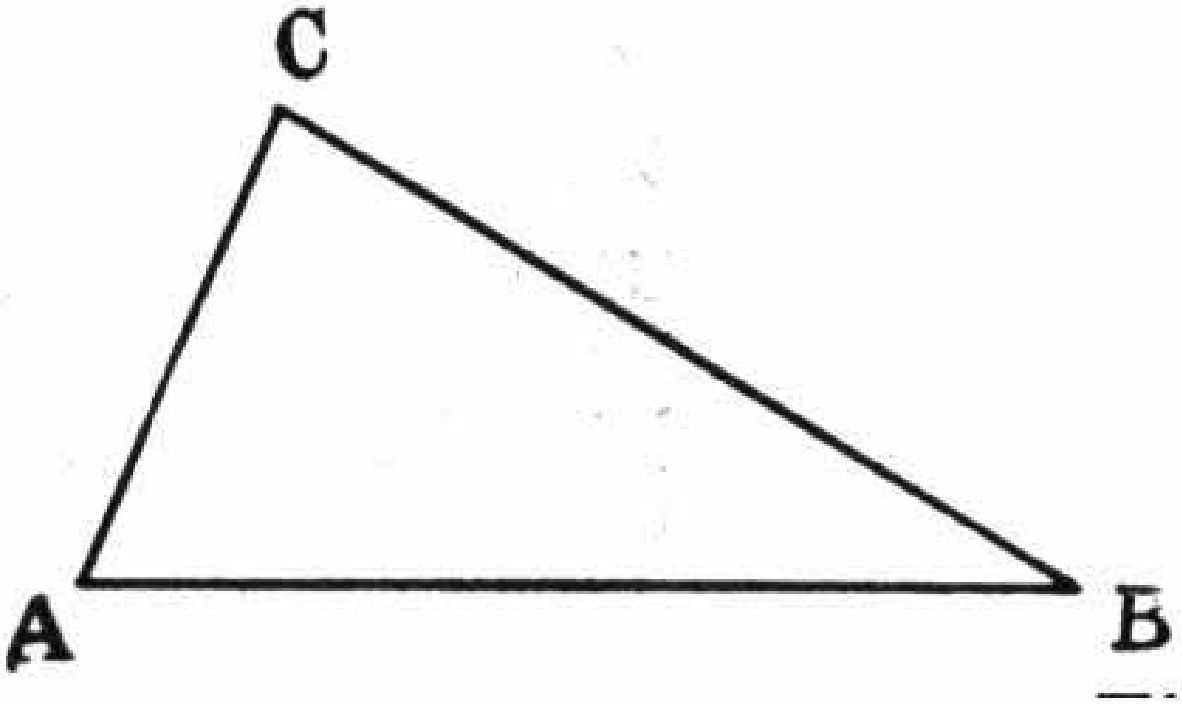


EQUILATERAL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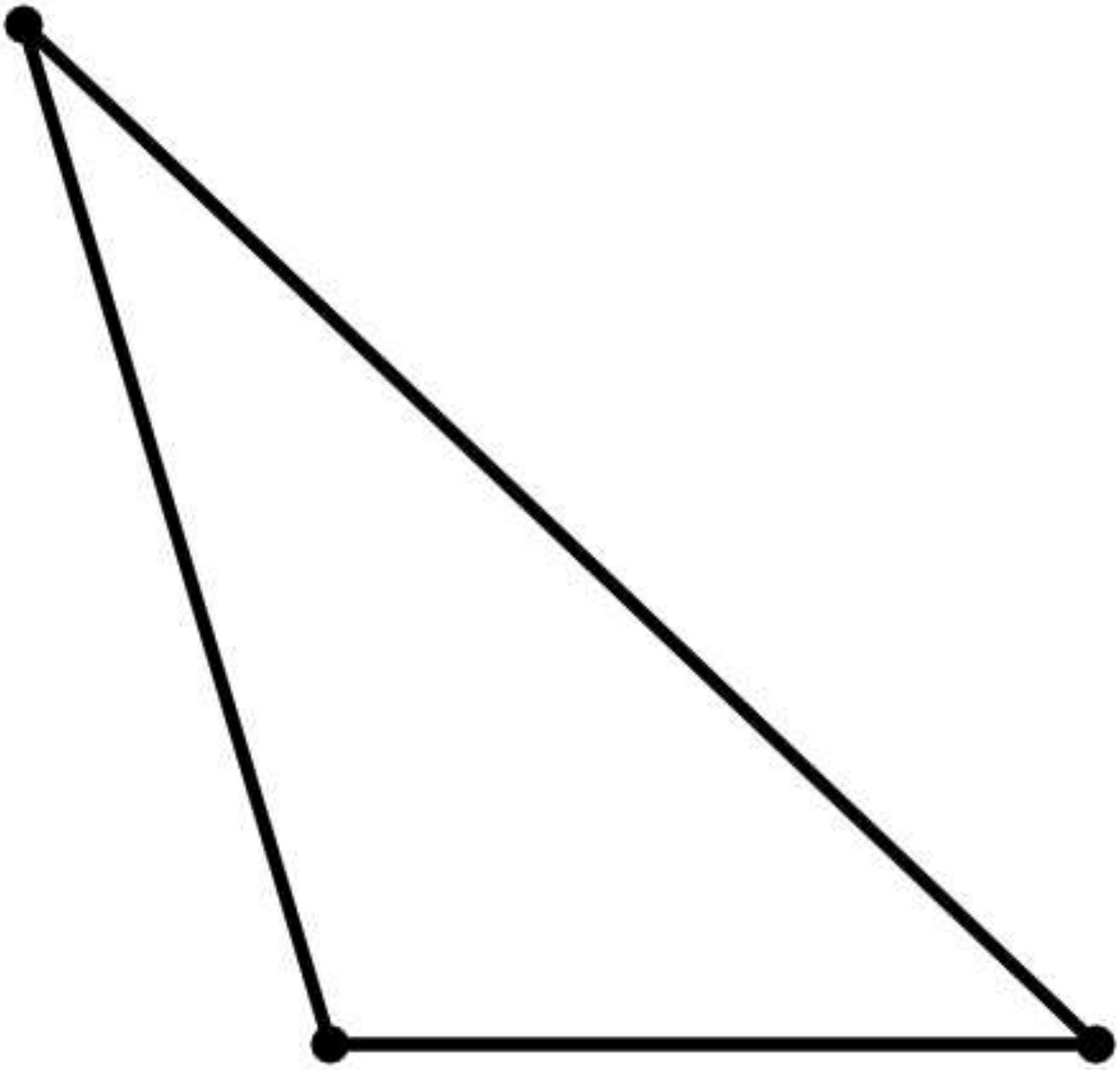
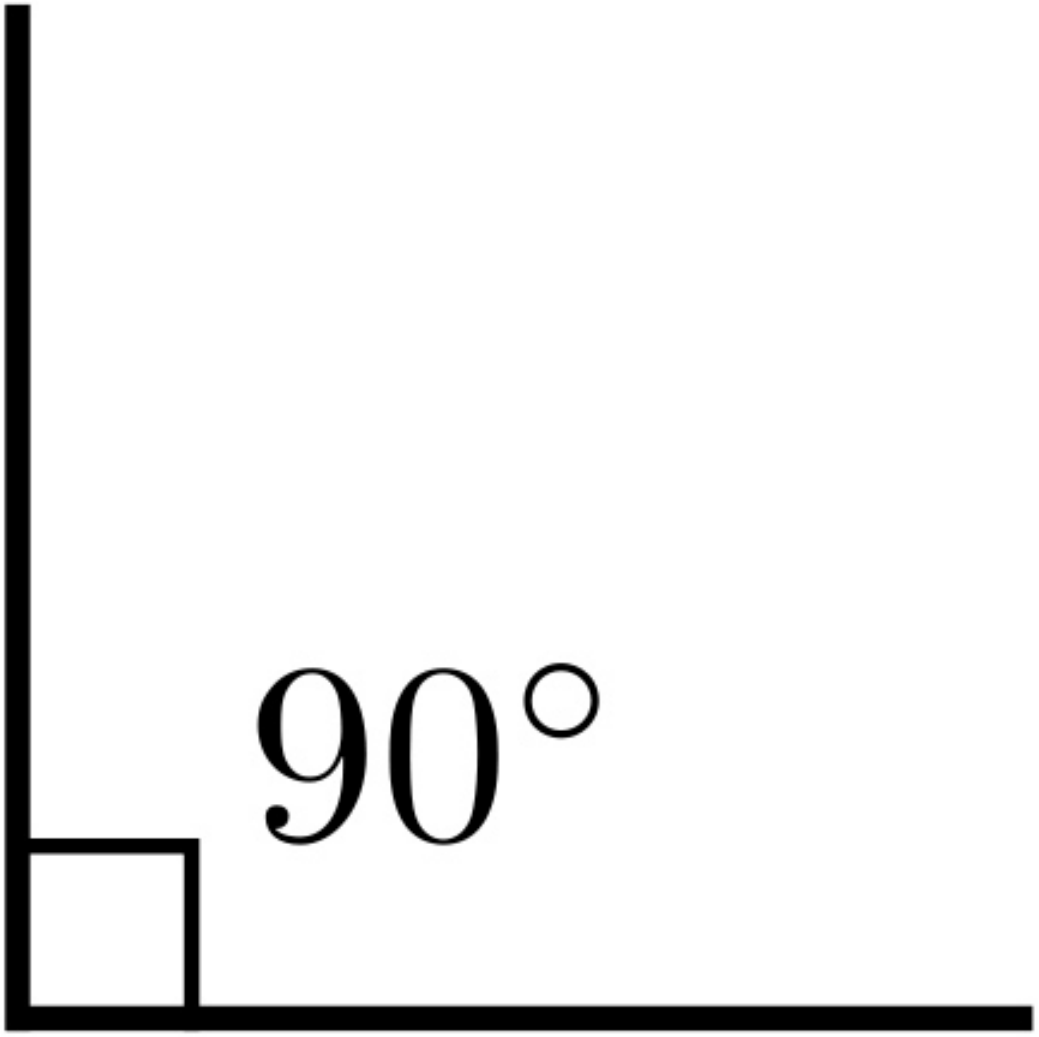
A
Б

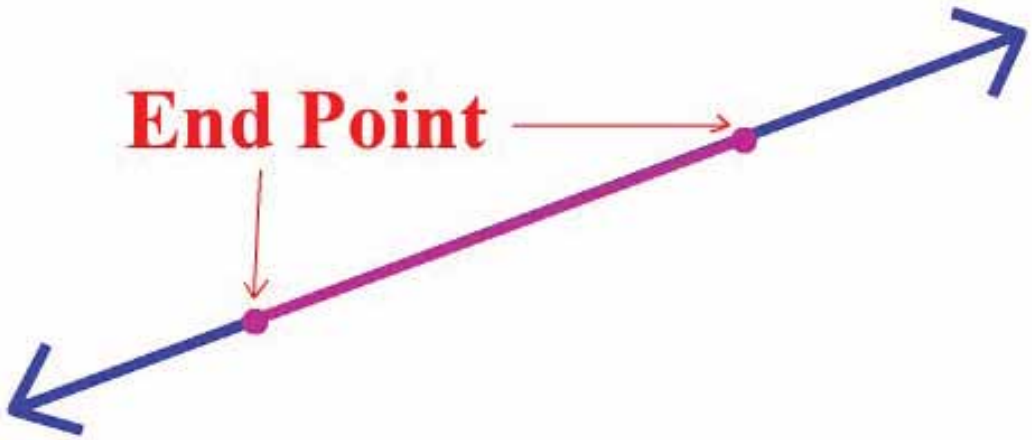
ACUTE



OBTUSE

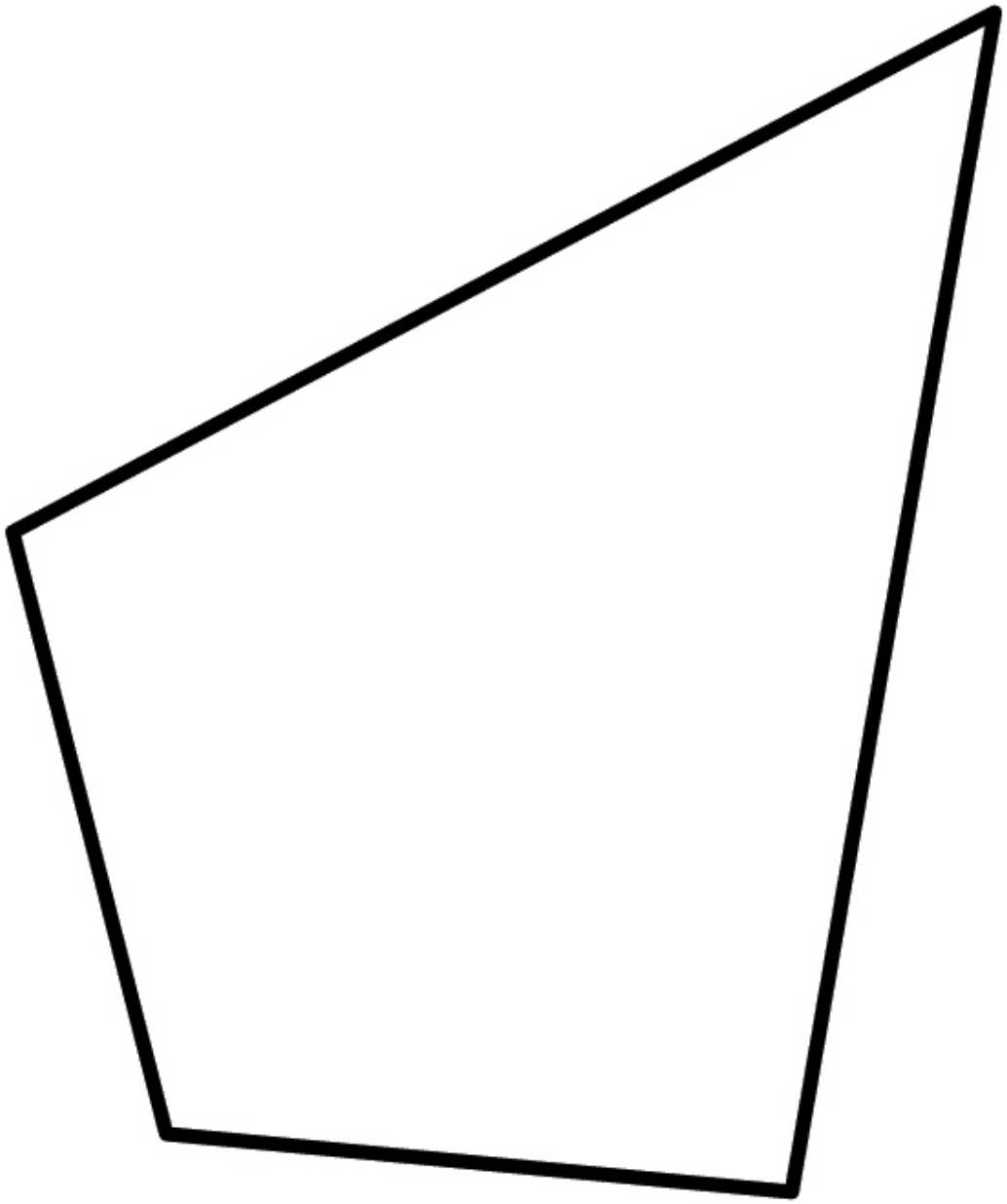

90°

RIGHT ANGLED



Line Segment

END POINTS



QUADRILATERAL

PYRAMID

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.

Change

Group the students in pairs. There should be one student without a partner to be "it" for the first round of the activity. Have the students in each pair stand back to back, with elbows interlocked. Tell the students to listen for a specific word, sequence of words, or sentence. When the students hear the word, sequence, or sentence you said at the beginning of the round, they should drop arms and quickly find new partners. However, "it" must also find a partner—thus producing a new "it" for the next round of the activity.

Hop the Line

Make a masking tape line on the floor. Have the students stand on the line—their toes touching the masking tape. Have the students listen for a specific word or sentence. Say a number of other words or sentences, eventually repeating the word or sentence you said at the beginning of the round. When the students hear that word or sentence, they must hop to the other side of the line. When the students hop to the other side of the line, they should then turn around and place their toes on the line once again. Repeat this process using a number of different vocabulary words or sentences.

Whisper

Mount the vocabulary illustrations on the chalkboard. Group the students into two teams. Whisper a vocabulary word to the first player in each team. When you say "Go," the first player in each team must then whisper the same word to the next player in his/her team. The players should continue whispering the vocabulary word in this way until the last player in a team hears the word. When the last player in a team hears the word, he/she must rush to the chalkboard and point to the illustration for the word. The first player to do this correctly wins the round. Repeat until all players have had an opportunity to identify a vocabulary illustration in this way. When a player has identified a vocabulary illustration, he/she should rejoin the front of his/her team.

Language and Skills Development

Join Those Halves

Make an extra set of vocabulary pictures. Cut each of the vocabulary illustrations in half. Spread the illustration halves on the floor in a scattered form. Group the students into two teams. Give the first two players in each team a long length of string or yarn. Say a vocabulary word. When you say "Go," the first two players in each team must rush to the illustration halves. The object of the activity is for the players to use the string/yarn to join together the two halves which make up the illustration for the word you said. The first pair of players to do this successfully wins the round. Repeat until all players have participated.

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

SPEAKING

Run and Catch

Group the students in a circle. Say a number to each student. Then, give each student a vocabulary picture. Stand in the center of the circle with a small portion of tissue paper. When you say "Go," the students should pass the vocabulary pictures around the circle in a clockwise direction. When you clap your hands, the students should stop passing the pictures. Call one of the students' numbers and toss the tissue paper into the circle at the same time. The student who has the number that you called must orally identify the vocabulary picture he/she has and then rush into the circle to catch the tissue paper before it hits the floor. Repeat this process until many students have responded.

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.

Number What?

Mount the vocabulary graphics on the chalkboard. Number each graphic. Call one of the numbers and the students should identify the graphic that is labeled with that number. Continue in this way until all of the vocabulary graphics have been identified a number of times. To add "spice" to the activity, you may wish to say a simple oral math problem, the answer to which is equal to one of the numbers on the chalkboard. (For example, you could say, "Six plus four, minus three, plus one." The answer would be "Eight." In this case, the students should identify the vocabulary graphic with the numeral "8" beside it.) This activity may also be done in team form. The first player to solve the math problem and then to identify the graphic that is labeled with the number answer to the math problem, wins the round.

Language and Skills Development

Back Match

Prepare a photocopy of each of the vocabulary pictures. Cut the photocopied pictures in half. Group the students in a circle. Walk around the outside of the circle, attaching the picture halves to the students' backs. Do not let the students see which picture halves they have on their backs. When each student has a picture half on his/her back, say "Go." The students must then match themselves together, according to the picture halves on their backs. Since the students will not know which pictures halves they have, they will have to rely on each other for assistance. When the students have correctly matched themselves together, have the students in each pair verbally identify the vocabulary word represented by the picture.

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.

Draw

Give all of the cards from a deck of playing cards to the students (preferably, all students should have the same number of cards). Have another deck of cards for yourself. Mount the vocabulary illustrations on the chalkboard. Hold one of your playing cards next to a vocabulary illustration. The student who has the matching playing card must then say the word for that picture. The student should then place that playing card to the side. The first student who has no playing cards left in his/her hands wins the game. This activity may be repeated more than once by collecting, mixing, and redistributing the playing cards to the students.

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

Right or Wrong?

Mount the sight words on the board. Point to one of the sight words and name it. The students should repeat the sight word. However, when you point to a sight word and say the wrong word for it, the students should remain silent. Repeat this process until the students have responded accurately to all of the sight words a number of times.

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.

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

Group Spell

Group the students into two groups. Identify one group as "consonants" and the other group as "vowels." Say a sight word. Then, the students should spell the word — the students in the "consonant" group saying the consonants and the students in the "vowels" groups saying the vowels. The students should continue in this way until the sight word has been correctly spelled. Repeat with other sight words, switching the groups periodically during the activity.

Language and Skills Development

Find the Other Half
Group the students into two teams. Give the first player in each team a flashlight. Cut each of the sight words in half. Mix the word halves together and attach them to the chalkboard in a scattered form. Stand between the two teams with a flashlight. Shine the light of your flashlight on a word half. The first player in each team must turn on his/her flashlight and find the other half of the word for the word half your light is shining on. The first student to do this correctly wins the round. Repeat.

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.

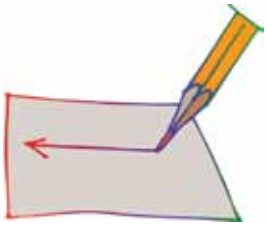
Student Support Materials
Have the students complete the sight recognition and encoding activities in the Student Support Materials. When finished, review their work.

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



Student Support Materials

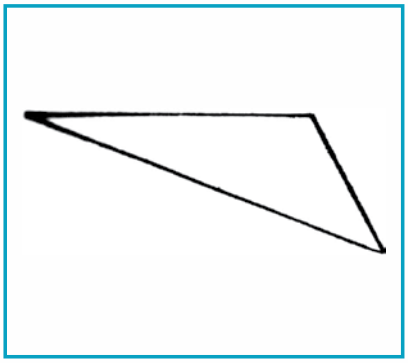
Have the students complete the sight recognition and encoding activities in the Student Support Materials. When finished, review their work.

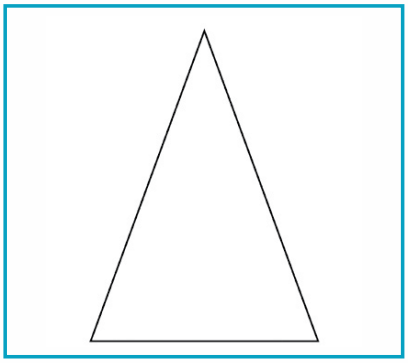
STUDENT SUPPORT MATERIALS

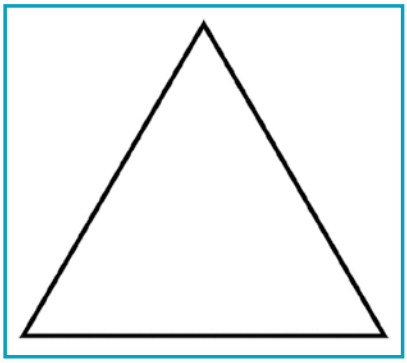
Listening • Mini Pictures

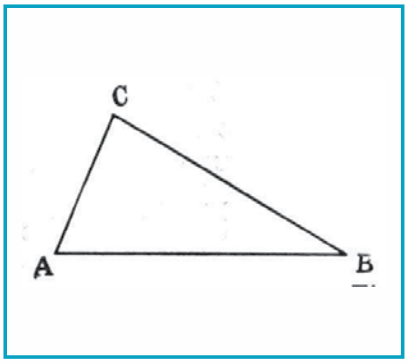
Listening: Mini Pictures

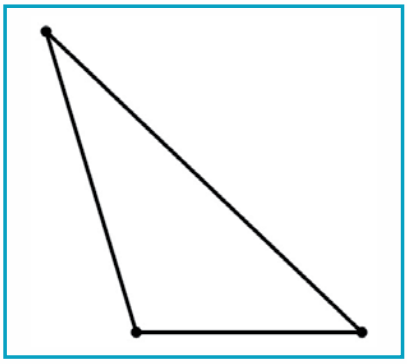
Have the students cut out the pictures. Say the key math words from this unit, and the students should hold up the pictures for them.

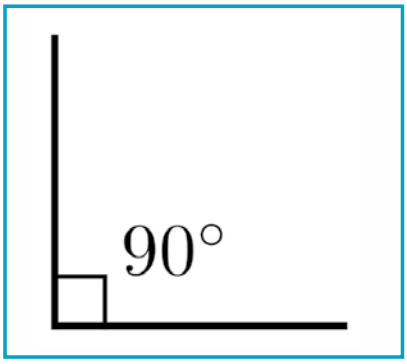


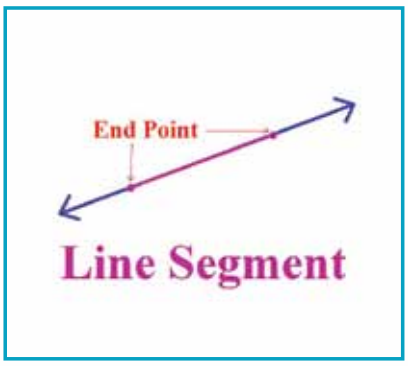


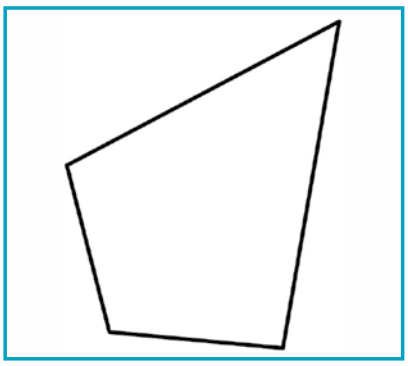


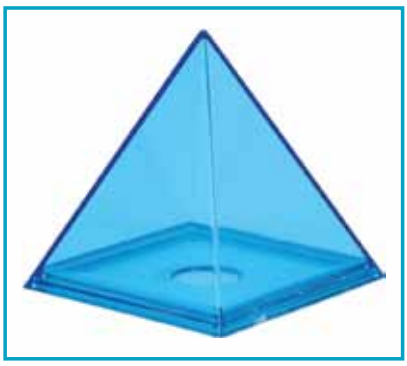






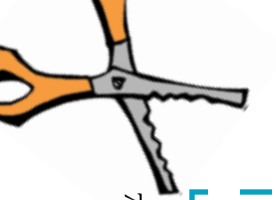






STUDENT SUPPORT MATERIALS

Sight Words



end points

scalene

isosceles

equilateral

acute

obtuse

right angled

quadrilateral

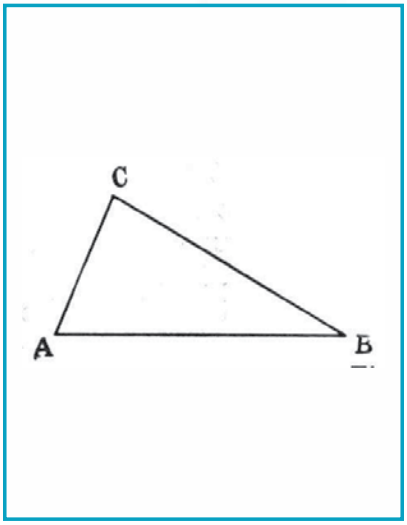
pyramid

STUDENT SUPPORT MATERIALS

Reading • Sight Recognition

Sight Words Activity Page

Have the students circle the word for each picture.



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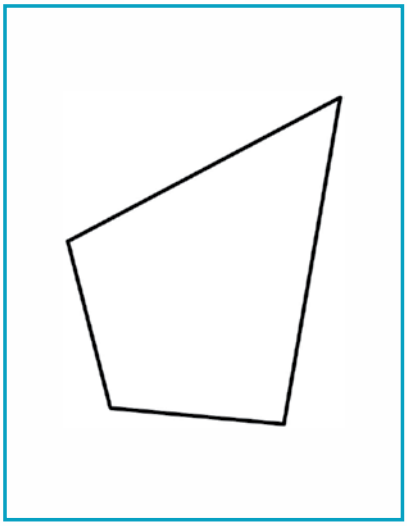

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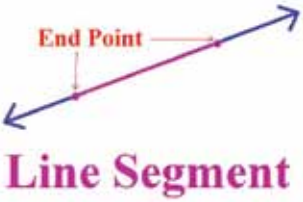

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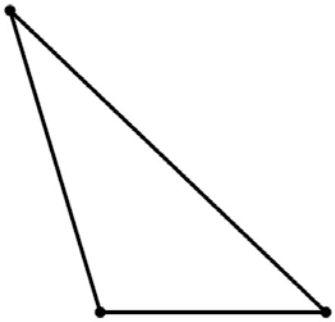

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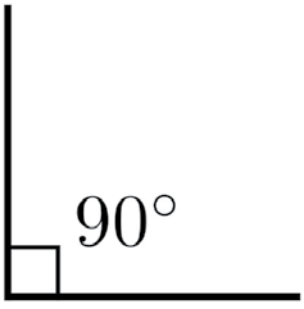

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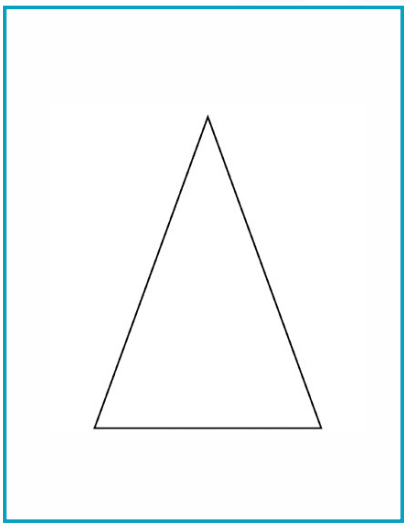
Sight Words Activity Page



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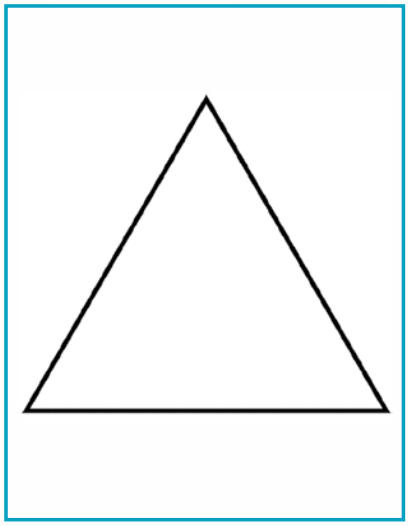

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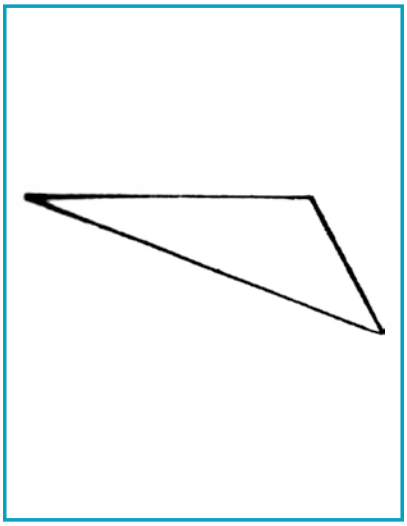

end points
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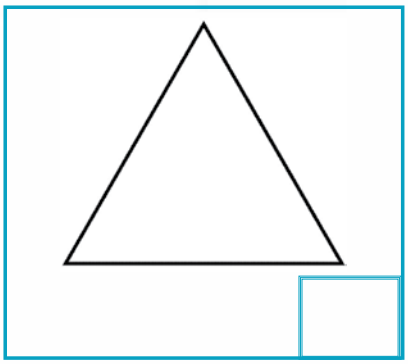
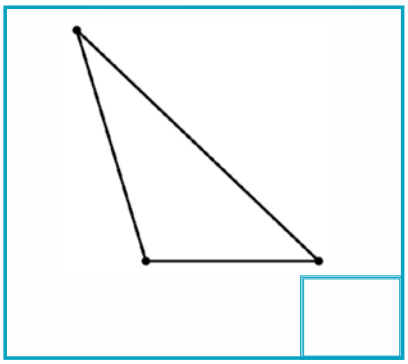
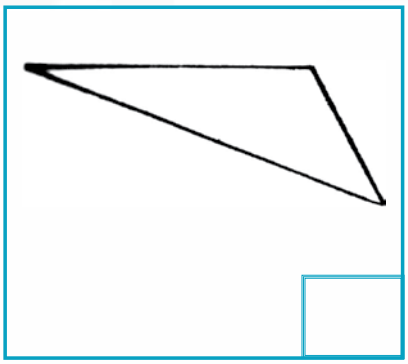
pyramid

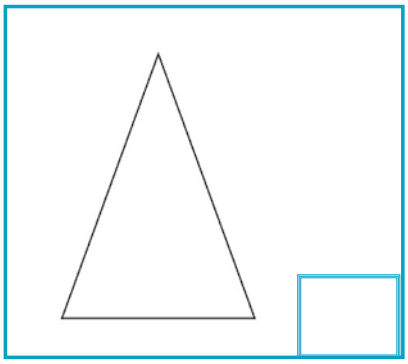
Sight Words Activity Page

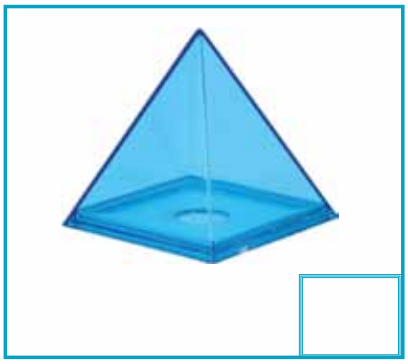
Write the numbers on their correct vocabulary graphics.

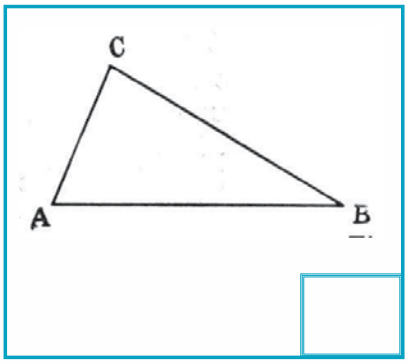


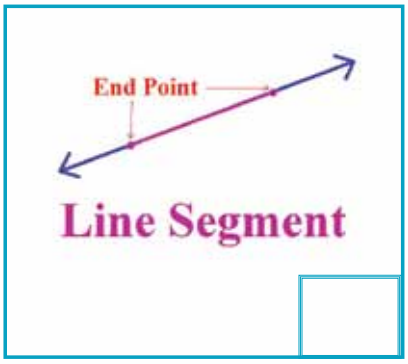


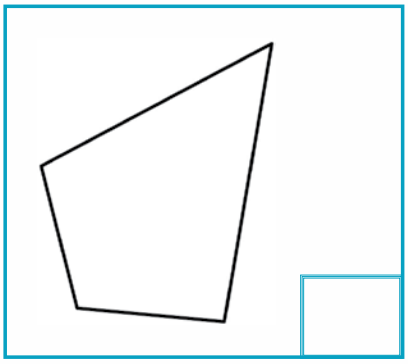


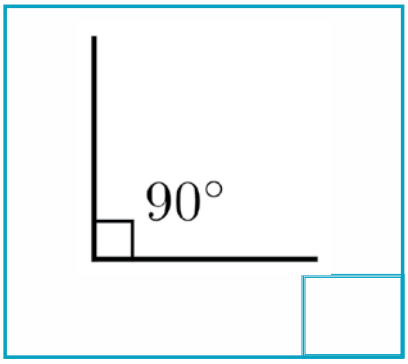












1. **end points**
2. **scalene**
3. **isosceles**
4. **equilateral**
5. **acute**
6. **obtuse**
7. **right angled**
8. **quadrilateral**
9. **pyramid**

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.

equilateral
end points
pyramid
quadrilateral
isosceles
obtuse
right angled
acute
scalene

e t c e g m q a s l i e e c s s r l
d n r e s u a a c u t e c a s o e e
y s u u a s y s p y r a m i d m e s
c c e a s a h d s c a l e n e a r a
g s c a l e d a c u t e a a s a a e
q g l r a e o e n d p o i n e a u d
m q q i d i s o b t e n d y a t t i
n a o b t u s e o s l r t e s i h e
o i q u a d r i l a t e r t d a e a
l g n n t y n t s t t p y r a p e b
q g u d i n r r e q u i l a t e c e
c r e l l l c d e t l r h i i r s e
n p i s o s c e l e s m t a d i b s
a a o t q u a d r i l a t e r a l n
e e m d s e n d p o i n t s q i p m
r i g h t a n g l e d e o t a e e l
t r i g h t a n g g t d e t u e s s
s a e o i s o s c e l e t s l l s n
l g s e e q u i l a t e r a l d s h
d b d u s s l e s p a a a d t p l t

Sight Words Activity Page

ANSWER KEY

equilateral
end points
pyramid
quadrilateral
isosceles
obtuse
right angled
acute
scalene

e t c e g m q a s l i e e c s s r l
d n r e s u a a c u t e c a s o e e
y s u u a s y s p y r a m i d m e s
c c e a s a h d s c a l e n e a r a
g s c a l e d a c u t e a a s a a e
q g l r a e o e n d p o i n e a u d
m q q i d i s o b t e n d y a t t i
n a o b t u s e o s l r t e s i h e
o i q u a d r i l a t e r t d a e a
l g n n t y n t s t t p y r a p e b
q g u d i n r r e q u i l a t e c e
c r e l l l c d e t l r h i i r s e
n p i s o s c e l e s m t a d i b s
a a o t q u a d r i l a t e r a l n
e e m d s e n d p o i n t s q i p m
r i g h t a n g l e d e o t a e e l
t r i g h t a n g g t d e t u e s s
s a e o i s o s c e l e t s l l s n
l g s e e q u i l a t e r a l d s h
d b d u s s l e s p a a a d t p l t

STUDENT SUPPORT MATERIALS

Reading • Encoding

Encoding Activity Page

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

end p_____ts

_____alene

equilat_____al

_____cute

_____tuse

sc	**a**	**oin**
er	**dri**	

Encoding Activity Page

right ang_____

qua_____lateral

_____ramid

is_____eles

ob	led
py	osc

Encoding Activity Page

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

end po	**tuse**
sca	**les**
isosce	**led**
equila	**ints**
a	**teral**

Encoding Activity Page

ob	teral
right ang	lene
quadrila	mid
pyra	cute

Encoding Activity Page

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

sos	les	i	ce
_____	_____	_____	_____

la	e	ter	qui	al
_____	_____	_____	_____	_____

dri	qua	al	la	ter
_____	_____	_____	_____	_____

Encoding Activity Page

ra **py** **mid**

_____ _____ _____

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 Endpoints mark...

- ❍ the vertices of quadrilaterals.
- ❍ the edges of irregular polygons.
- ❍ the end of line segments.
- ❍ the exponents in whole numbers.

2 In a scalene triangle...

- ❍ all sides and angles are the same.
- ❍ all sides are the same but angles are different.
- ❍ all angles are the same but sides are different.
- ❍ all sides and angles are different.

3 In an isosceles triangle...

- ❍ two sides are the same length.
- ❍ all sides and angles are different.
- ❍ all sides are the same length.
- ❍ no sides are the same length.

4 An equilateral triangle has...

- ❍ two congruent sides.
- ❍ no congruent sides.
- ❍ an irregular radius.
- ❍ three congruent sides.

5 In an acute triangle, all angles are...

- ❍ more than 180°.
- ❍ less than 90°.
- ❍ more than 90°.
- ❍ obtuse.

6 An obtuse triangle has...

- ❍ one angle that is more than 90° and less than 180°.
- ❍ two angles are less than 180° but more than 90°.
- ❍ all angles are less than 90°.
- ❍ all angles are right angles.

What's the Answer?

7 A right angled triangle has...

- ❍ two obtuse angles.
- ❍ three congruent vertices.
- ❍ one 90° angle.
- ❍ two angles that are more than 180°.

8 A quadrilateral is...

- ❍ a polyhedron with 4 faces.
- ❍ a flat shape with four straight sides.
- ❍ a four sided shape with no straight lines.
- ❍ a polygon with equal vertices.

9 The base of a pyramid is a...

- ❍ polyhedron.
- ❍ quadrilateral.
- ❍ polygon.
- ❍ vertex.

What's the Answer?

ANSWER KEY

1 Endpoints mark...

- ❍ the vertices of quadrilaterals.
- ❍ the edges of irregular polygons.
- ● the end of line segments.
- ❍ the exponents in whole numbers.

2 In a scalene triangle...

- ❍ all sides and angles are the same.
- ❍ all sides are the same but angles are different.
- ❍ all angles are the same but sides are different.
- ● all sides and angles are different.

3 In an isosceles triangle...

- ● two sides are the same length.
- ❍ all sides and angles are different.
- ❍ all sides are the same length.
- ❍ no sides are the same length.

4 An equilateral triangle has...

- ❍ two congruent sides.
- ❍ no congruent sides.
- ❍ an irregular radius.
- ● three congruent sides.

5 In an acute triangle, all angles are...

- ❍ more than 180°.
- ● less than 90°.
- ❍ more than 90°.
- ❍ obtuse.

6 An obtuse triangle has...

- ● one angle that is more than 90° and less than 180°.
- ❍ two angles are less than 180° but more than 90°.
- ❍ all angles are less than 90°.
- ❍ all angles are right angles.

What's the Answer?

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- ❍ two obtuse angles.
- ❍ three congruent vertices.
- ● one 90° angle.
- ❍ two angles that are more than 180°.

8 A quadrilateral is...

- ❍ a polyhedron with 4 faces.
- ● a flat shape with four straight sides.
- ❍ a four sided shape with no straight lines.
- ❍ a polygon with equal vertices.

9 The base of a pyramid is a...

- ❍ polyhedron.
- ❍ quadrilateral.
- ● polygon.
- ❍ vertex.

Reading Comprehension Activity Page

Write the numbers/letters for sentence halves that match.

1	End points show	A	three congruent sides.
2	In a scalene triangle, all	B	an outside angle that is more than 90°.
3	In an isosceles triangle	C	a polygon as a base.
4	In an isosceles triangle	D	angles and sides are differen in size.
5	In an acute triangle, all inside	E	90° angle.
6	An obtuse triangle has	F	two sides are the same length.
7	A right angled triangle has one	G	with four flat sides.
8	A quadrilateral is a flat shape	H	the ends of a line segment.
9	A pyramid has	I	angles are less than 90°.

1→_____ 2→ _____ 3→ _____ 4→ _____

5→ _____ 6→ _____ 7→ _____ 8→ _____

9→ _____

Reading Comprehension Activity Page

ANSWER KEY

1	End points show	A	three congruent sides.
2	In a scalene triangle, all	B	an outside angle that is more than 90°.
3	In an isosceles triangle	C	a polygon as a base.
4	In an isosceles triangle	D	angles and sides are differen in size.
5	In an acute triangle, all inside	E	90° angle.
6	An obtuse triangle has	F	two sides are the same length.
7	A right angled triangle has one	G	with four flat sides.
8	A quadrilateral is a flat shape	H	the ends of a line segment.
9	A pyramid has	I	angles are less than 90°.

1→ H 2→ D 3→ F 4→ A

5→ I 6→ B 7→ E 8→ G

9→ C

Reading Comprehension Activity Page

Cut out the words and glue them under their definitions.

These mark the ends of a line segment.	**In this triangle, all sides are different lengths and no sides or angles are equal.**	**In this triangle, two sides are the same length.**
This triangle has three congruent sides.	**In this triangle, all inside angles are less than 90°.**	**This triangle has an outside angle that is more than 180°.**
This triangle has one 90° angle.	**This is a flat shape with four straight sides.**	**This shape has a polygon as a base.**

acute **right angled** **end points** **equilateral**

obtuse **scalene** **pyramid**

isosceles **quadrilateral**

Reading Comprehension Activity Page

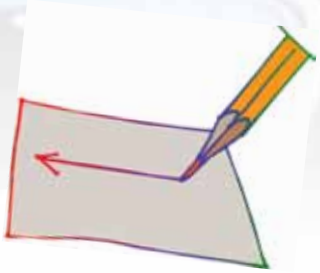
ANSWER KEY

These mark the ends of a line segment. end points	**In this triangle, all sides are different lengths and no sides or angles are equal.** scalene	**In this triangle, two sides are the same length.** isosceles
This triangle has three congruent sides. equilateral	**In this triangle, all inside angles are less than 90°.** acute	**This triangle has an outside angle that is more than 180°.** obtuse
This triangle has one 90° angle. right angled	**This is a flat shape with four straight sides.** quadrilateral	**This shape has a polygon as a base.** pyramid

STUDENT SUPPORT MATERIALS

Writing

Writing Activity Page



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

end p_____nts

scal_____

iso_____les

equi_____eral

ac_____

_____tuse

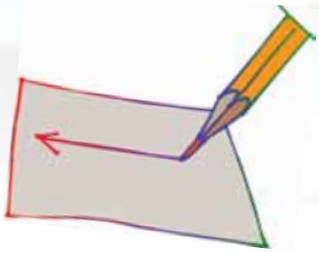
right _____led

quadr_____eral

_____amid

Writing Activity Page

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



e_____ts

sc_____e

is_____s

eq_____l

ac_____e

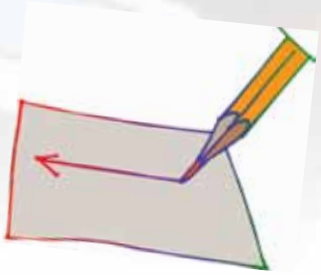
ob_____e

ri_____ed

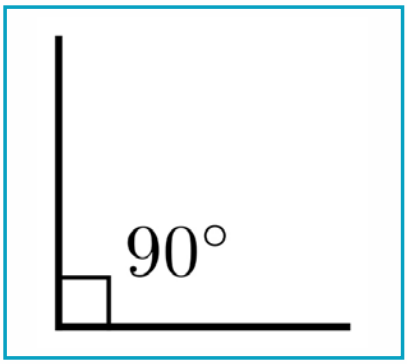
qu_____l

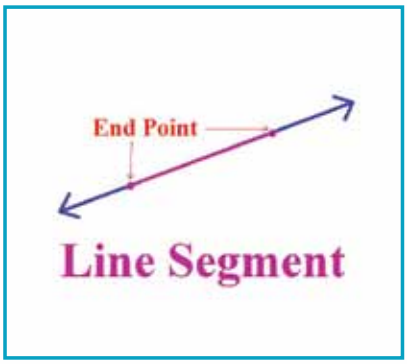
py_____d

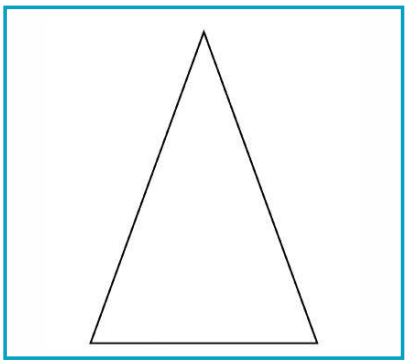
Basic Writing Activity Page

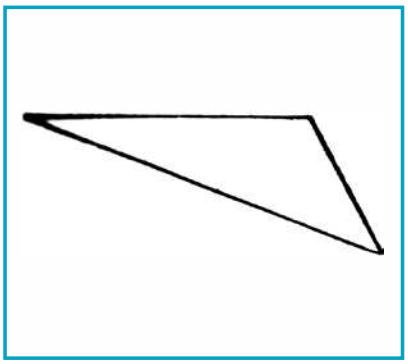


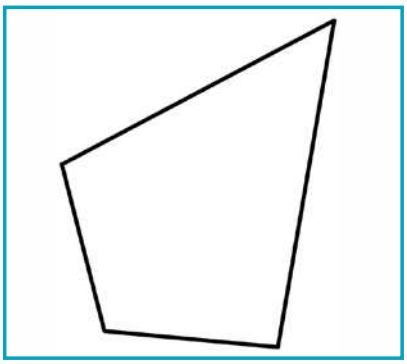
Have the students write the word for each picture.





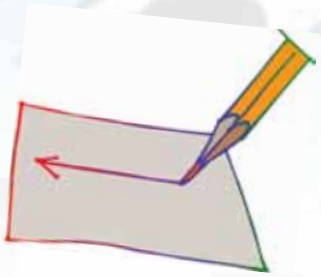


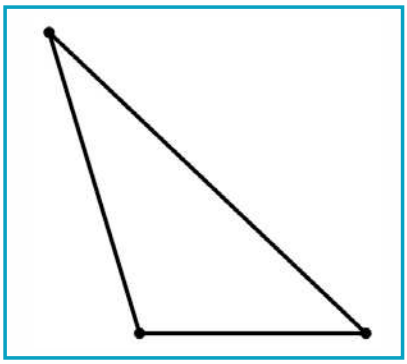


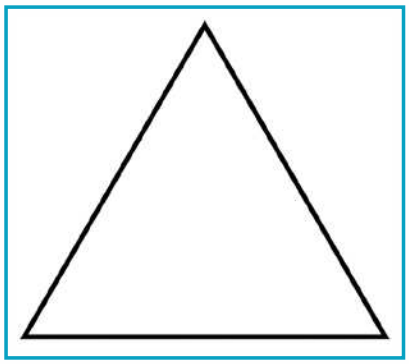


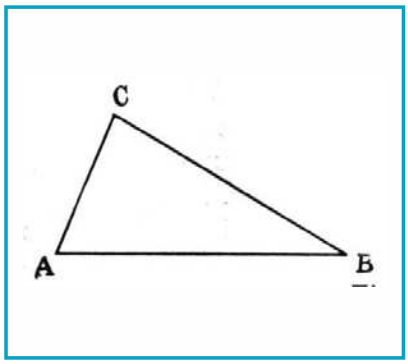
Basic Writing Activity Page

Have the students write the word for each picture.

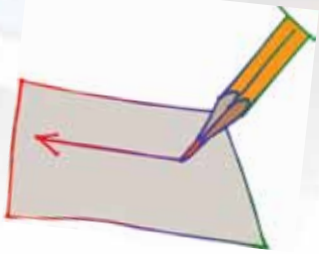


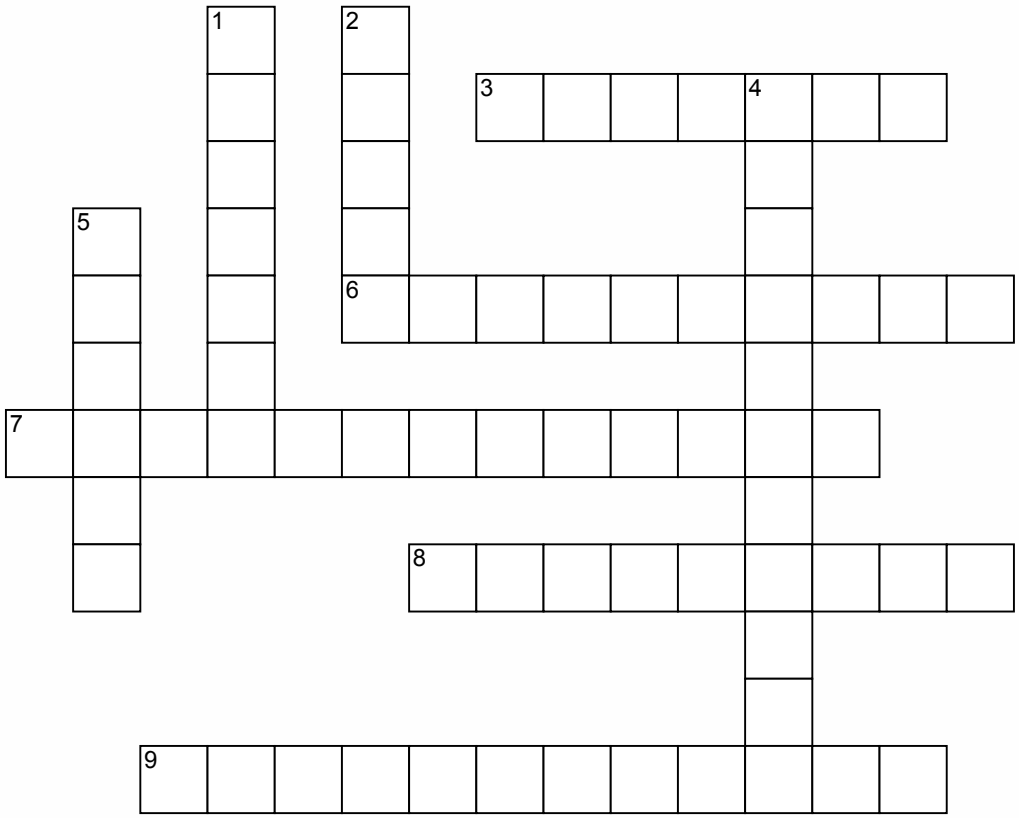






Crossword Puzzle





www.CrosswordWeaver.com

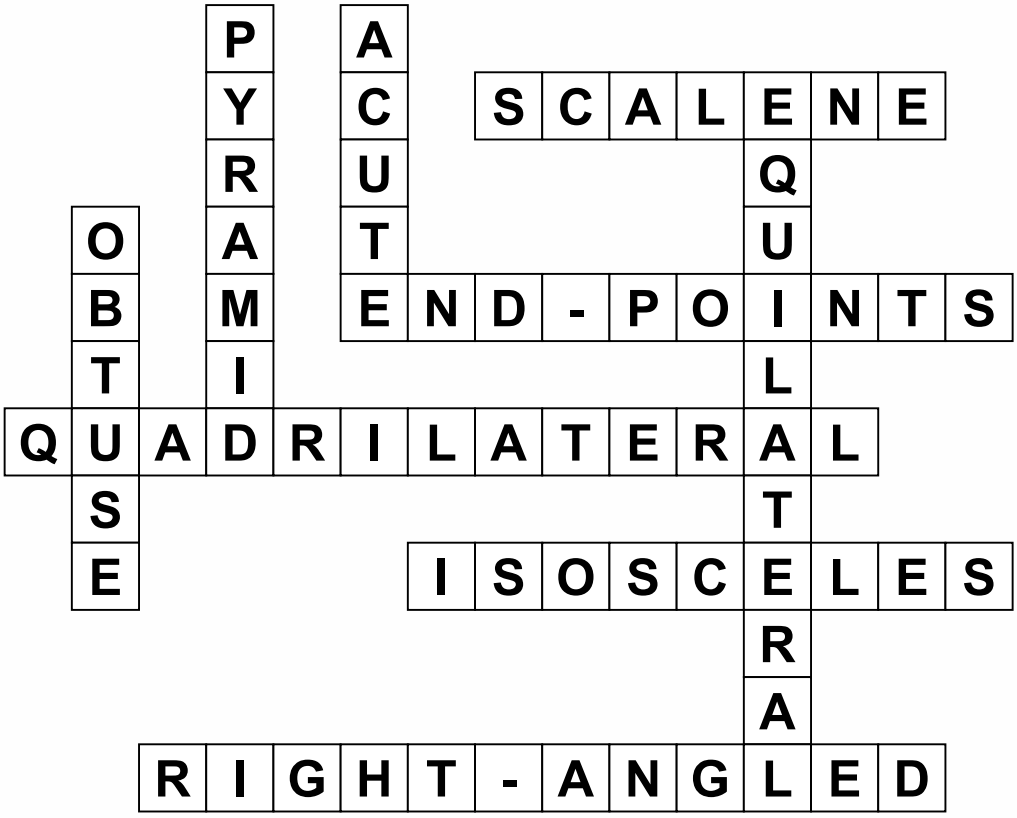
ACROSS

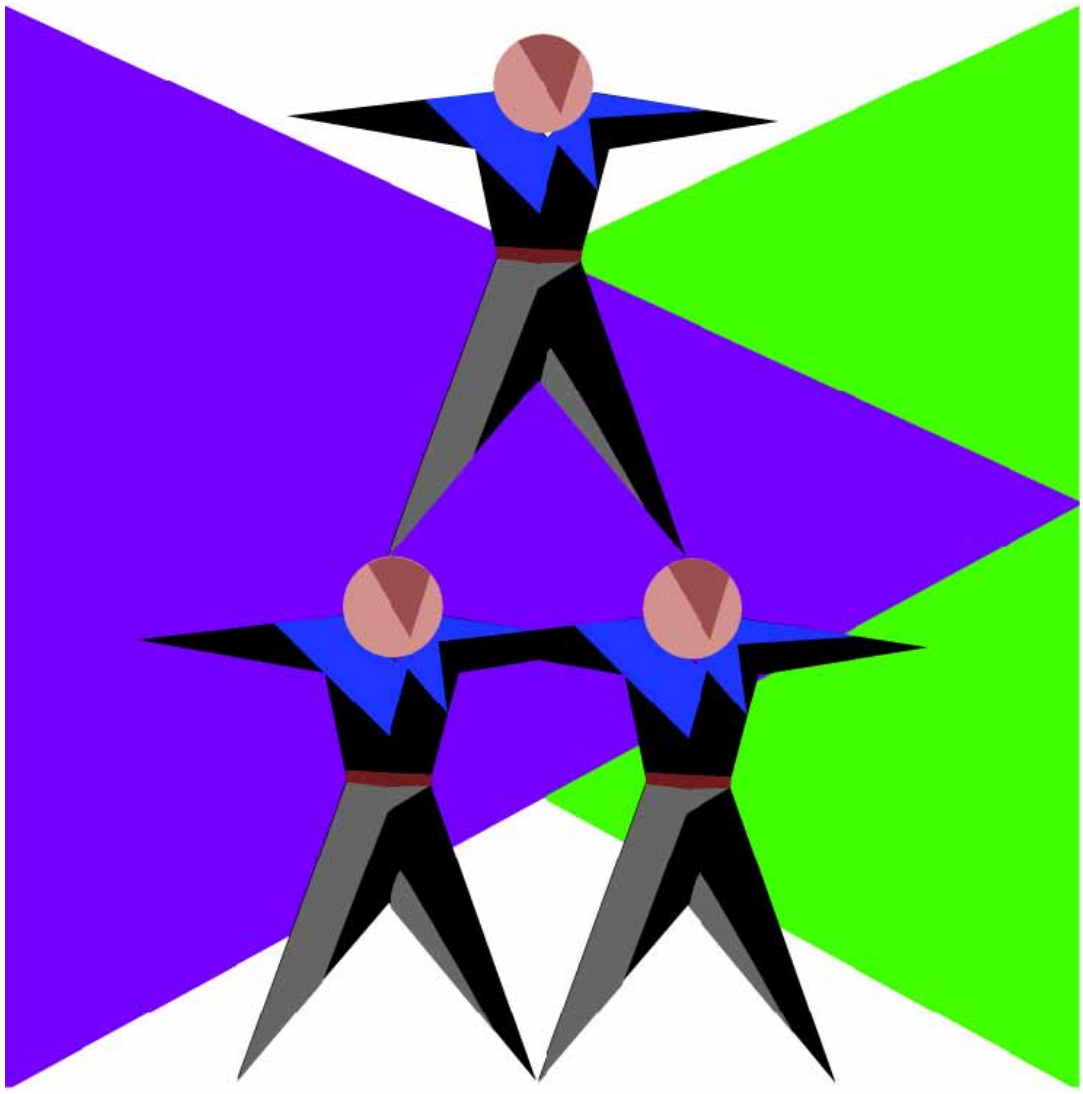
3 In this triangle, all sides are different lengths and no sides or angles are equal.
6 These mark the ends of a line segment.
7 This is a flat shape with four straight sides.
8 In this triangle, 2 sides are the same length.
9 This triangle has one 90 degree angle.

DOWN

1 This shape has a polygon as a base.
2 In this triangle, all inside angles are less than 90 degrees.
4 This triangle has three congruent sides.
5 This triangle has an outside angle that is more than 180 degrees.

Crossword Puzzle Answers





UNIT ASSESSMENT

GEOMETRY

Unit Assessment Teacher's Notes
Grade 7 • Unit 8
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 **END POINTS**.
2. Write the number 2 by the picture for a **SCALENE TRIANGLE**.
3. Write the number 3 by the picture for an **ISOSCELES TRIANGLE**.
4. Write the number 4 by the picture for an **EQUILATERAL TRIANGLE**.
5. Write the number 5 by the picture for an **ACUTE ANGLE**.
6. Write the number 6 by the picture for an **OBTUSE ANGLE**.
7. Write the number 7 by the picture for a **RIGHT ANGLED TRIANGLE**.
8. Write the number 8 by the picture for a **QUADRILATERAL**.
9. Write the number 9 by the picture for a **PYRAMID**.

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.

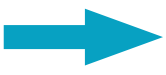
READING COMPREHENSION

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.

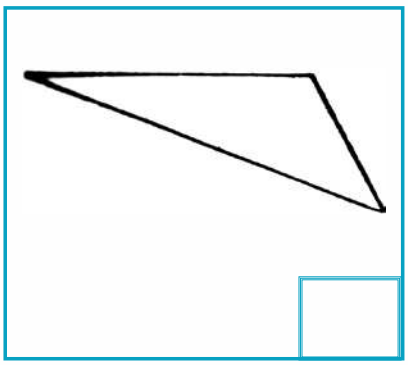


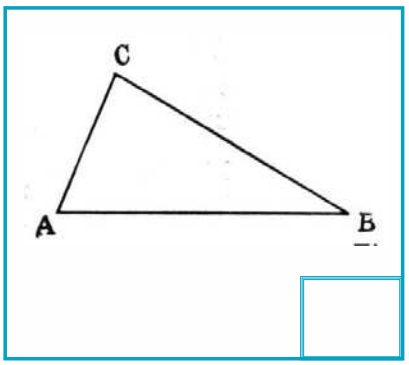
MATH PROGRAM

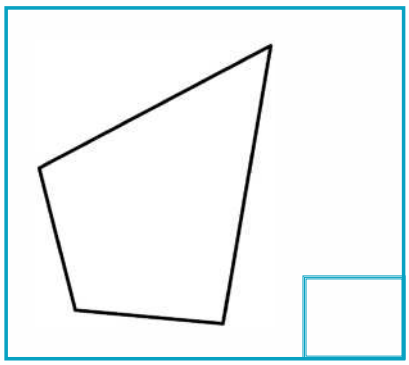
Unit Assessment Student Pages
Grade 7 • Unit 8

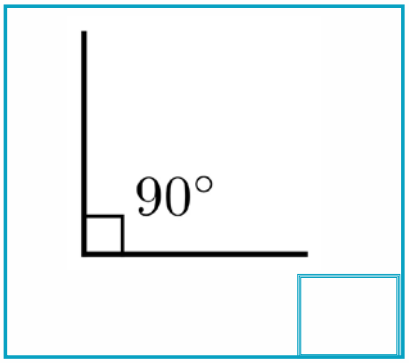
Date:_____ **Student's Name:_____**

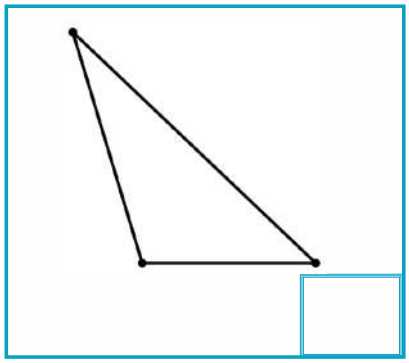
Number Correct:_____ **Percent Correct:_____**

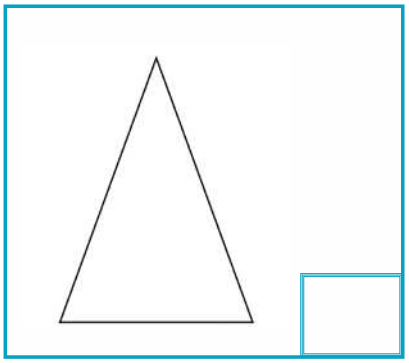


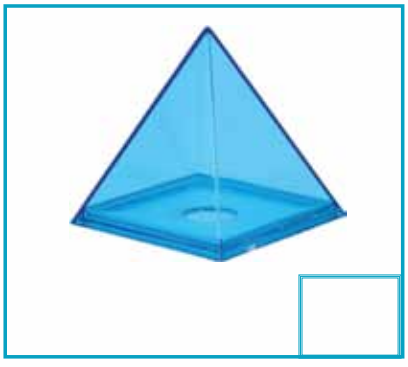

C
A
B

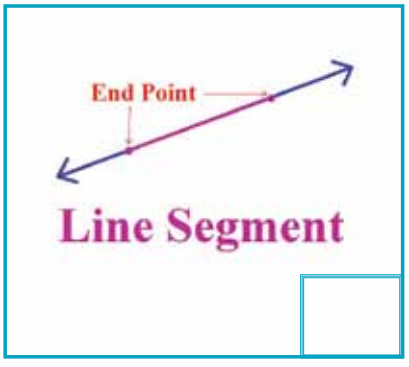


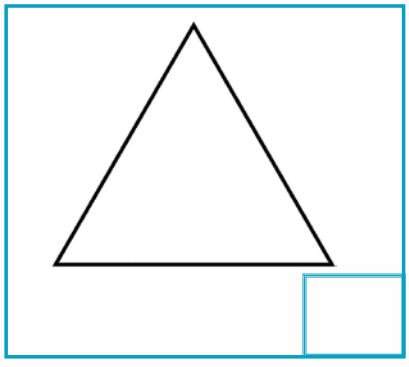

90°

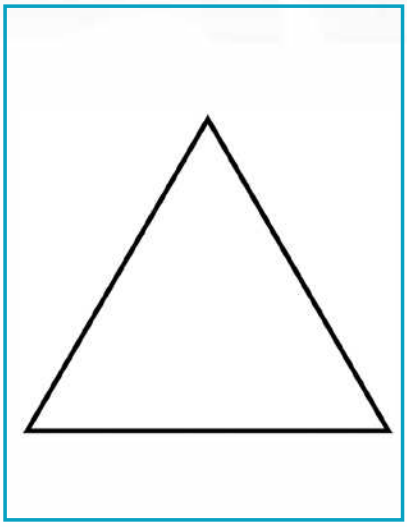




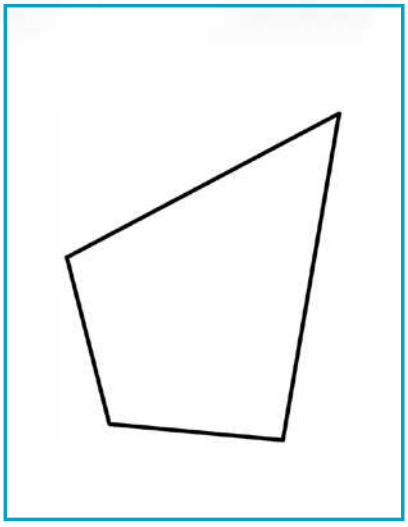



End Point
Line Segment





end points
scalene
isosceles
equilateral
acute
obtuse
right angled
quadrilateral
pyramid



end points
scalene
isosceles
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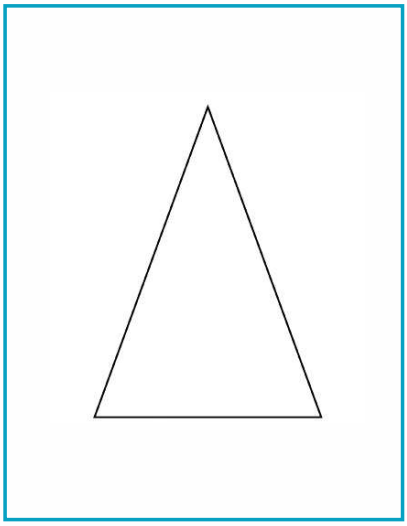

end points
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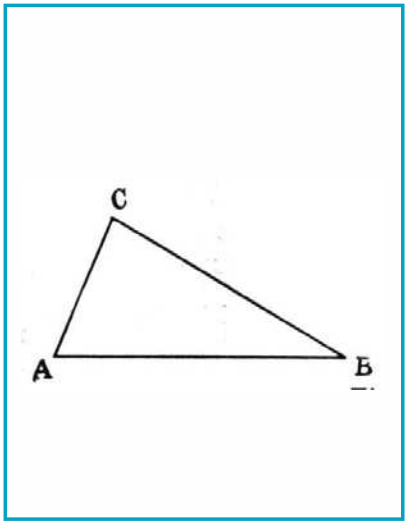

end points
scalene
isosceles
equilateral
acute
obtuse
right angled
quadrilateral
pyramid

end points
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right angled
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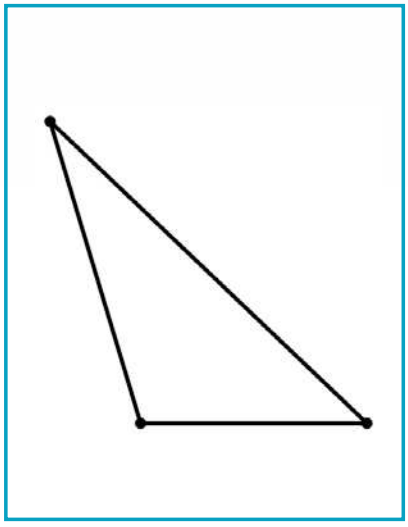

end points
scalene
isosceles
equilateral
acute
obtuse
right angled
quadrilateral
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end points
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end points
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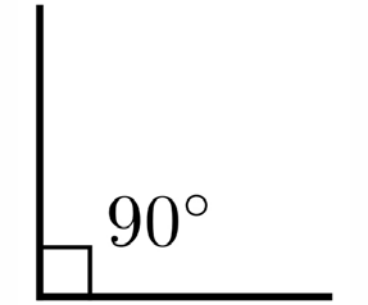

end points
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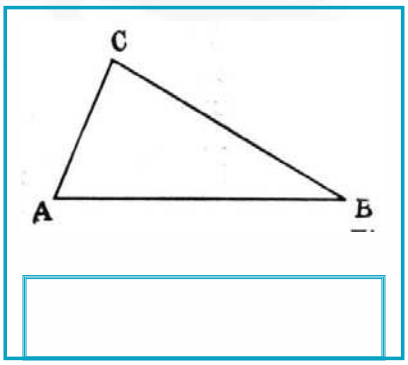
These mark the ends of a line segment.	In this triangle, all sides are different lengths and no sides or angles are equal.	In this triangle, two sides are the same length.
This triangle has three congruent sides.	In this triangle, all inside angles are less than 90°.	This triangle has an outside angle that is more than 180°.
This triangle has one 90° angle.	This is a flat shape with four straight sides.	This shape has a polygon as a base.

equilateral	acute	end points	obtuse
right angled	pyramid	quadrilateral	isosceles
scalene			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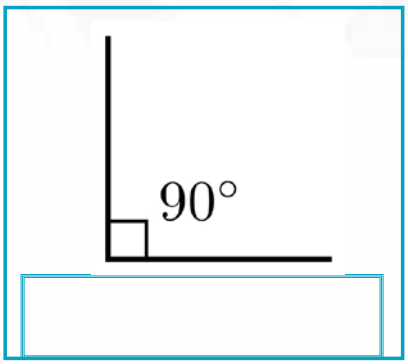
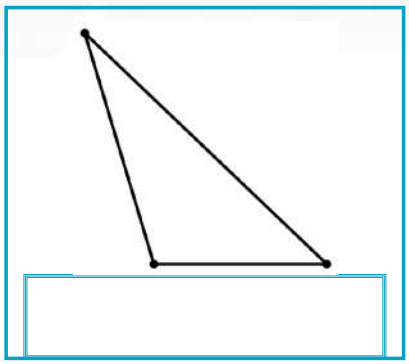
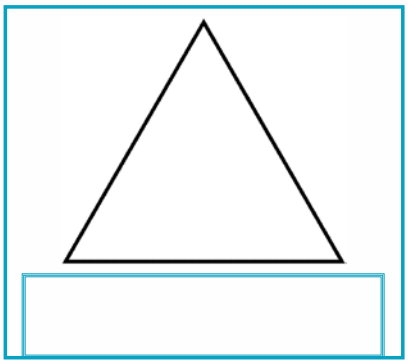
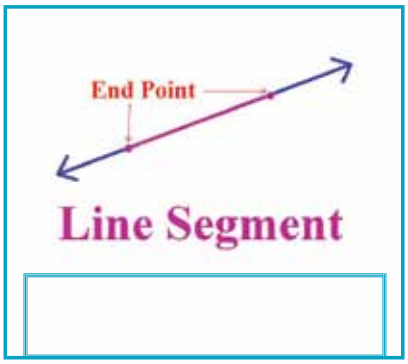

90°






End Point
Line Segment