

learning focus:

- ✓ classify triangles, quadrilaterals, polygons in graphic organizers
- ✓ solve problems related to perimeter and area of polygons
- ✓ convert units within the metric and customary measurement system

GEOMETRY AND MEASUREMENT UNIT

11 DAY TEKS-ALIGNED UNIT



CLASSIFYING TRIANGLES STUDENT HANDOUT

A triangle is a polygon with three sides. Triangles can be classified by their angles and their sides.

CLASSIFYING

A _____ triangle has one right angle (90°). An _____ triangle has 3 acute angles.



1. Classify the triangles below using proper terminology.



Triangles can also be classified by their side lengths. Tick marks are used to indicate congruence.

CLASSIFY

An _____ triangle has 3 congruent sides.



Classify triangles A-E using proper terminology.

GEOMETRY AND MEASUREMENT UNIT Table of Contents

PAGE	TOPIC	RESOURCE
5-6	Ideas for Implementation & Helpful Hints	Student Handout
7	Understanding Graphic Organizers	Independent Practice
9	Understanding Graphic Organizers	Student Handout
11	Classifying Triangles	Independent Practice
13	Classifying Triangles	Student Handout
15	Classifying Quadrilaterals	Independent Practice
17	Classifying Quadrilaterals	Student Handout
19	Classifying Polygons	Independent Practice
21	Classifying Polygons	Student Handout
23	Perimeter of Polygons	Independent Practice
25	Perimeter of Polygons	Student Handout
27	Area of Polygons	Independent Practice
29	Area of Polygons	Student Handout
31	Applying Perimeter and Area of Polygons	Independent Practice
33	Applying Perimeter and Area of Polygons	Quiz
35	Geometry Quiz	Student Handout

GEOMETRY AND MEASUREMENT UNIT REVIEW

Name _____
Date _____ Pd. _____

Solve each of the problems below. Be sure to ask questions if you need more help with a topic.

I CAN CLASSIFY TRIANGLES.

1. Create a graphic organizer that could be used to demonstrate ways that triangles can be classified appropriately.

2. Draw a triangle that meets the given criteria: right and isosceles.

3. Draw a scalene triangle.

7

EQUILATERAL TRIANGLES

name of the triangle

angles: _____ and 4 right angles

A MANEUVERING THE MIDDLE ® RESOURCE

GEOMETRY AND MEASUREMENT



a 11 day TEKS-aligned unit
TEKS: 5.4H, 5.5A, 5.7A

**ready-to-go, scaffolded
student materials**

GEOMETRY AND MEASUREMENT UNIT

Table of Contents

PAGE	TOPIC	RESOURCE
5-6	Ideas for Implementation & Helpful Hints	
7	Understanding Graphic Organizers	Student Handout
9	Understanding Graphic Organizers	Independent Practice
11	Classifying Triangles	Student Handout
13	Classifying Triangles	Independent Practice
15	Classifying Quadrilaterals	Student Handout
17	Classifying Quadrilaterals	Independent Practice
19	Classifying Polygons	Student Handout
21	Classifying Polygons	Independent Practice
23	Perimeter of Polygons	Student Handout
25	Perimeter of Polygons	Independent Practice
27	Area of Polygons	Student Handout
29	Area of Polygons	Independent Practice
31	Applying Perimeter and Area of Polygons	Student Handout
33	Applying Perimeter and Area of Polygons	Independent Practice
35	Geometry Quiz	Quiz
37	Converting Metric Units	Student Handout
39	Converting Metric Units	Independent Practice
41	Converting Customary Units	Student Handout
43	Converting Customary Units	Independent Practice
45	Geometry and Measurement Unit Review	Review
49	Geometry and Measurement Unit Test	Test
53	Geometry and Measurement Unit Answer Key	Answer Key

GEOMETRY AND MEASUREMENT



a 11 day TEKS-aligned unit

TEKS: 5.4H, 5.4A, 5.7A

student friendly + real-world application

UNDERSTANDING GRAPHIC ORGANIZERS
STUDENT HANDOUT

Name _____
Date _____ Pd _____

Graphic organizers can be used to classify items into groups based on characteristics of the items. Using the graphic organizer below, place the items in the category you think it best belongs.

A. GALA APPLE D. CHIPS
B. CARROT E. ENVY APPLE
C. BLUEBERRIES F. COOKIES

• Are all apples a fruit? Explain how the graphic organizer supports your thinking.

• Are all food items a fruit? Explain how the graphic organizer supports your thinking.

• If an item is placed in the "apple" category, what other categories can you assume it belongs to?

The categories in this graphic organizer represent a _____. A category inside a set is _____. A subset has all the characteristics of the set, as we can see all apples are considered a fruit.

Graphic organizers can be useful to classify geometric figures. Different figures have characteristics called _____. The box below describes the properties of a _____.

POLYGON

- A _____ two-dimensional figure with _____ sides.
- Polygons are named by their number of _____.
- Ex: 3-sided figure: _____ 4-sided figure: _____

1. Use the properties of a polygon to place the letter of each shape in the appropriate category on the graphic organizer. Then answer questions a and b.

a. Reese knows that all two-dimensional figures are flat shapes. Will all polygons be flat shapes? Explain your thinking.

b. Use the graphic organizer to complete the sentence below:
All _____ are _____ but not all _____ are _____.

scaffolded concepts

AREA OF POLYGONS
INDEPENDENT PRACTICE

Name _____
Date _____ Pd _____

Find the area of each figure below. Match your answers in the table to solve the riddle.

L: 396 in^2	M: $13\frac{3}{4} \text{ in}^2$	T: 30.4 in^2	N: 196 in^2	E: $4\frac{2}{7} \text{ in}^2$	P: 198 in^2
A: 90 in^2	W: 56 in^2	O: 56.76 in^2	G: 132 in^2	Y: 97.44 in^2	C: 39.8 in^2

WHAT DO YOU CALL AN EMPTY PARROT CAGE?

A _____

5 1 2 2 6 4 1 7 3

self-checking practice

GEOMETRY AND MEASUREMENT



a 11 day TEKS-aligned unit
TEKS: 5.5A, 5.7A, 5.4H

unit study guide + assessments

✓ quizzes

✓ editable unit test

GEOMETRY QUIZ

Name _____ Date _____ Pd _____

Answers

- _____
- _____
- _____

I. A quadrilateral is a polygon with 4 sides and 4 angles.
II. Rectangles, squares, and triangles are all examples of quadrilaterals.
III. All parallelograms are quadrilaterals.

Which of the statements are true?
a. I only b. II only c. I and II

2. Mrs. Johnson asked her students to list ways the triangle shown can be classified. The student correctly completed the task?

ETHAN **DELANEV**
SCALENE, OBTUSE **SCALENE, ACUTE**

Answer the questions below. Be sure to show your work.

3. A small rectangular dog crate pillow has a length of 22.3 inches and width of 14 inches. What is the area, in square inches, of the crate pillow?

a. 36.3 in²
b. 312.2 in²
c. 72.6 in²
d. 145.2 in²

5. Which student(s) drew a graphic organizer that correctly classifies triangles?

SHAY

GEOMETRY AND MEASUREMENT UNIT REVIEW

Name _____ Date _____ Pd _____

Solve each of the problems below. Be sure to ask questions if you need more help with a topic.

I CAN CLASSIFY TRIANGLES.

- Create a graphic organizer that could be used to demonstrate ways that triangles can be classified according to their sides. The graphic organizer should be 1-2 sentences summarizing what the demonstrates.
- Sketch a triangle that meets the given criteria:

3. Circle the name of the student(s) who correctly completed the missing category in the graphic organizer. Justify your answer.

RICARDO **GOLE** **MARIA**
OBTUSE TRIANGLES **ACUTE TRIANGLES** **ISOSCELES TRIANGLES**

I CAN CLASSIFY QUADRILATERALS.

4. Three students drew a figure on the grid above the figure they drew.

- Savannah drew a quadrilateral with two sets of parallel sides.
- Daphne drew a quadrilateral with two sets of parallel sides and two right angles.
- Gina drew a quadrilateral with two sets of parallel sides and two right angles.

CLASSIFYING QUADRILATERALS STUDENT HANDOUT

Name **Answer Key** _____ Date _____ Pd _____

A quadrilateral is a polygon with four sides and four angles. To classify quadrilaterals, ask the following questions about the sides and angles. Below each question, sketch an example of a quadrilateral with the given properties.

How many sets of parallel sides does it have?

Ex: 2 sets of parallel sides

How many congruent sides does it have?

Ex: 4 congruent sides

How many right angles does it have?

Ex: 4 right angles

In 1-3, highlight the sets of parallel sides. Then list the number of congruent sides and right angles.

<p>1. Congruent sides: <u>2 sets</u> Right angles: <u>4</u></p>	<p>2. Congruent sides: <u>0</u> Right angles: <u>2</u></p>	<p>3. Congruent sides: <u>4</u> Right angles: <u>0</u></p>
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Use the table to define and sketch an example of each type of quadrilateral.

PARALLELOGRAM	RECTANGLE	RHOMBUS	SQUARE	TRAPEZOID
A quadrilateral with <u>two</u> sets of <u>parallel</u> and <u>congruent</u> sides.	A parallelogram with <u>two</u> sets of <u>parallel</u> and <u>congruent</u> sides and <u>four</u> right angles.	A parallelogram with <u>all four</u> sides equal length.	A parallelogram with <u>all four</u> sides equal length and <u>four</u> right angles.	A quadrilateral with <u>one</u> set of <u>parallel</u> sides.

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answer keys included