

SPECIAL ED

GEOMETRY POLYGONS



INCLUDES GOOGLE SLIDES

This unit was created with this guy in mind. He has autism and an intellectual disability. He is a non-reader, has a very short attention span, and has a few foundational math skills. With some support, he is able to do this unit and enjoys the challenge. He is my tester!!



Polygons & Quadrilaterals Unit

By
Christa Joy
Special Needs for Special Kids



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Also included in this resource as separate files:

- Lesson plans
- Links and directions to digital activities
- PowerPoint (this is the book in the lesson plan)
- Voice recorded PowerPoint
- Activities in black and white

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This unit contains 14 days of material that is in both printable and digital formats. I have included a detailed lesson plan to help you make the most of everything in this unit including how to add some group activities.

It comes in 2 separate files. One in color and one in black and white.

Geometry: Polygons & Quadrilaterals Lesson Plan

Preparation

- Print out a vocabulary board for each student to use throughout unit
 - Laminate or place in page protector
- Book
 - Print out, laminate, and bind
 - OR your students can listen to the pre-recorded version
- Vocabulary cards
 - Print out a set of cards onto cardstock and laminate
 - Make one set for each student and also one for the teacher to use in I Spy games

Preassessment (do day 1 before starting lesson)

- Choose the form of the assessment that best fits the learning level of your students
- Give the assessment to assess what your students may already know
- I cannot emphasize enough how important this step is. If you want to see growth, this preassessment is so important!!

Teaching Tips

1. **Color Coding:** this is a really easy activity. Outline or color in an er the corresponding picture symbols task.
 - a. For more info, read more h <https://specialneedsforspeci differentiation/>
 - b. I also have a blog post on c <https://specialneedsforspeci 3-ways-easily-and-effectivel>
2. **Make you own copies of the activ** yesterday. For that reason:
 - a. I often complete the activity that I could use year after y
 - b. My copies were also helpfu more support or as a way fi work.

Quick Look

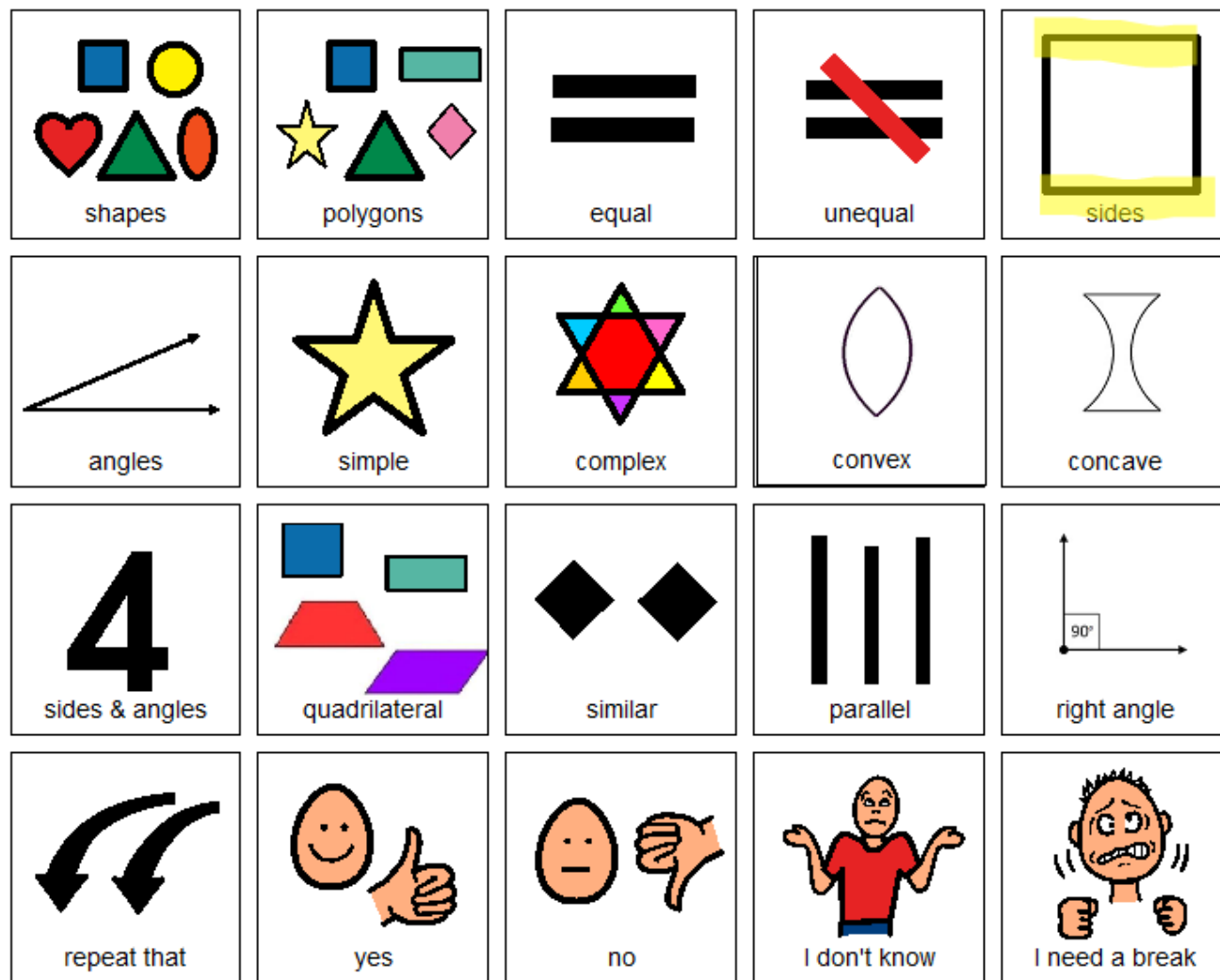
Day	Activity	Day	Activity	Day	Activity
1	<ul style="list-style-type: none"> • Book • Vocab cards activity • Scavenger hunt • Circle map • Shape collage 	6	<ul style="list-style-type: none"> • Book • Vocab cards activity • Circle the polygons 	11	<ul style="list-style-type: none"> • Book • Vocab cards cut and paste • Close worksheet
2	<ul style="list-style-type: none"> • Book • Vocab cards activity • Scavenger hunt • Circle map • Shape collage 	7	<ul style="list-style-type: none"> • Book • Vocab cards activity • Circle the polygons 	12	<ul style="list-style-type: none"> • Book • Vocab cards cut and paste • Close worksheet
	• Book		• Book		• Book

Day 9

Activity	Notes	Materials
Read or listen to a recording of the book (10 minutes)	<ul style="list-style-type: none"> • Read through the story, asking lots of questions • Continue to make connections between book and vocabulary board 	<ul style="list-style-type: none"> • Book • Vocabulary board
Vocabulary cards Bean Bag Toss (10 minutes)	<ul style="list-style-type: none"> • Glue the cut apart symbols to the paper plates (one on each plate) • Arrange them around the room • Students toss the bean bag trying to get it to land on a paper plate <ul style="list-style-type: none"> ◦ Students retrieve the paper plate and share the vocabulary card they retrieved 	<ul style="list-style-type: none"> • Vocabulary cards • Vocabulary cards cut apart • Small paper plates or pieces of construction paper • Bean bags
worksheet review (5 minutes)	<ul style="list-style-type: none"> • Review the worksheets completed yesterday 	<ul style="list-style-type: none"> • Worksheets completed yesterday
Matching Polygons (10 minutes)	<ul style="list-style-type: none"> • Do one of the matching worksheets • Choose either with or without rotation • Students complete the worksheet • Make connections to the book as necessary 	<ul style="list-style-type: none"> • Worksheet • Scissors • glue
Sharing (10 minutes)	<ul style="list-style-type: none"> • Each student shares their finished worksheet with the group using the communication method of their choice 	<ul style="list-style-type: none"> • Completed worksheets • Communication devices

The lesson plans contain:

- Overall tips for teaching students with significant needs
- A quick look at what you will do each day
- Detailed instructions on how that day's lesson should run



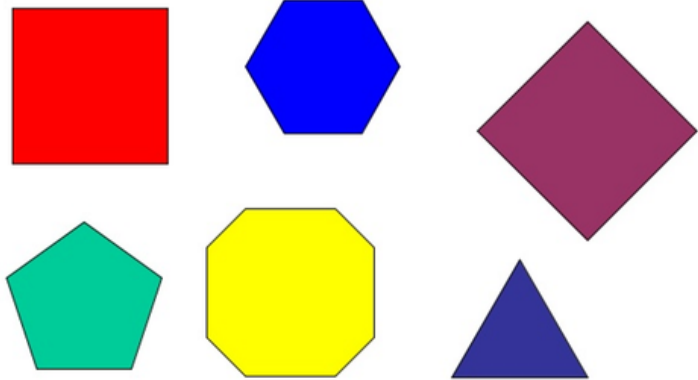
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This unit comes with a vocabulary board.

Vocabulary boards are great for ALL students to assist with participation and engagement in group discussions.

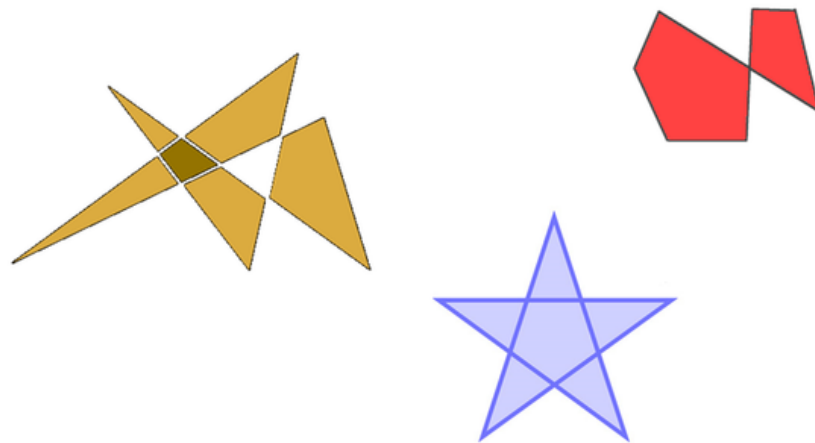
Tips on how to use in the unit!!

Polygon is the name we use for any shape that has *straight sides* that are *closed*. All the shapes below are considered polygons.



©Christa Joy, SNSK

But some polygons are considered **complex**. A **complex** polygon is a shape where two sides intersect or cross one another.



©Christa Joy, SNSK

There is a 43-page book about quadrilaterals and polygons that students will use to complete the activities.

- pdf version
- voice-recorded PPT
- mp4 movie format

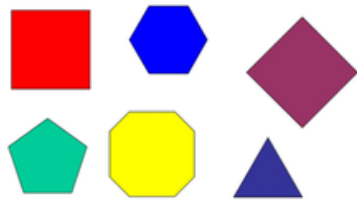
Vocabulary

There are 12 vocabulary cards that come in color and black and white.

- Included are suggestions for group activities to do with these each day.
- There is also a cut-and-paste activity.

polygon

Any shape that has *straight sides* that are *closed*.



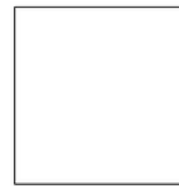
regular polygon

Polygons have *sides* that are all equal.



rectangle

Quadrilateral with 4 equal angles, but the sides are not all the same length.



parallelogram

Quadrilateral with opposite sides parallel.



irregular polygon

Polygons have angles or sides that are *NOT* equal.



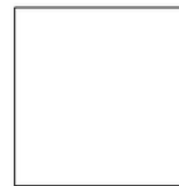
complex polygon

Polygon is a shape where two sides intersect or cross one another.



rhombus

Quadrilateral that is a parallelogram with 4 equal sides.

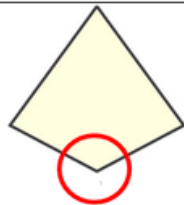


trapezoid

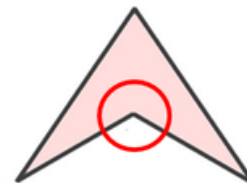
Quadrilateral with one pair of parallel sides.



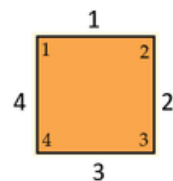
convex



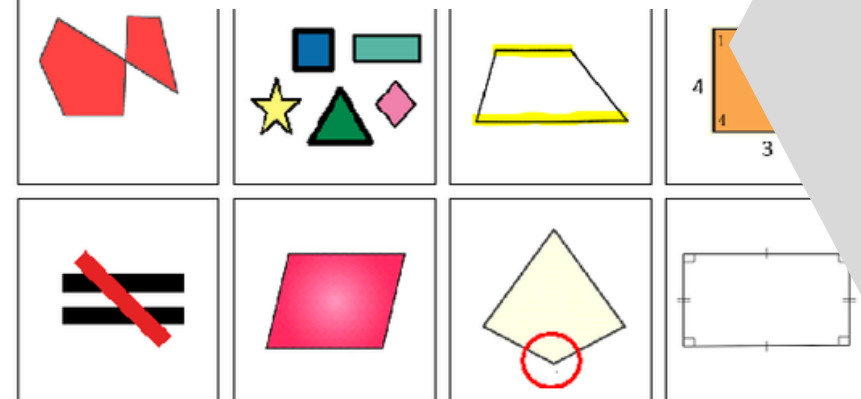
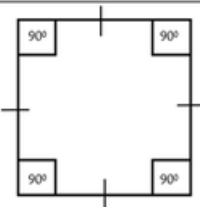
concave



quadrilateral



square

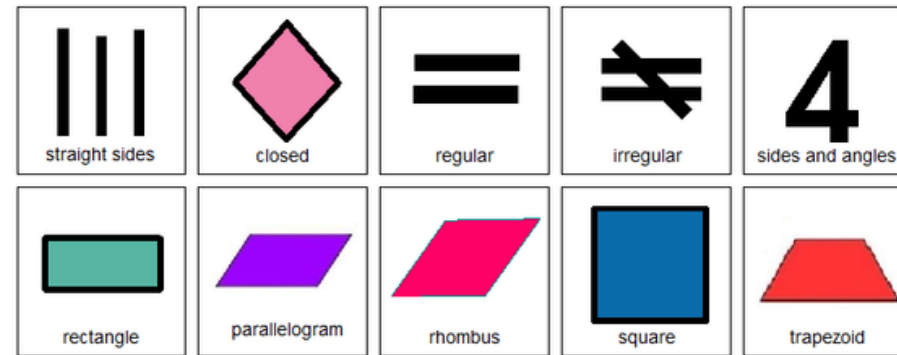
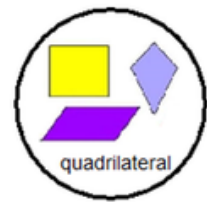


<p>Polygon with angles that point inward.</p> <p>Quadrilateral that only has ONE pair of parallel sides.</p>	<p>Any shape with 4 sides and 4 angles.</p> <p>Any shape that has <i>straight sides</i> that are <i>closed</i>.</p>
<p>Polygon with angles that point outward.</p> <p>Polygons have angles or sides that are NOT equal.</p>	<p>Quadrilateral that is a parallelogram with 4 equal sides.</p> <p>Quadrilateral with 4 equal sides and 4 equal angles.</p>

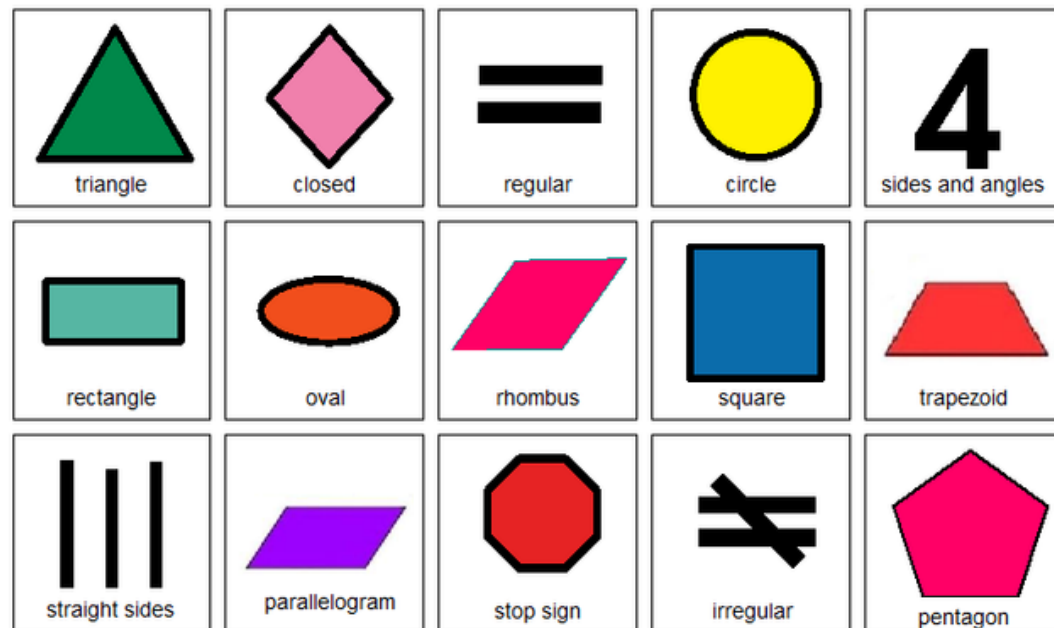
Circle maps

Cut apart pictures and place in circle map about quadrilaterals.

Errorless version



Cut apart pictures and place in circle map **ONLY IF** they relate to quadrilaterals.

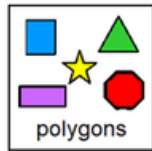


There is a circle map on polygons and one on quadrilaterals reviewing facts from the book.

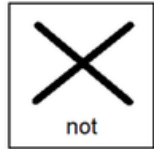
Circle maps are a great way for students to see the concept at a glance.

There are 2 versions:

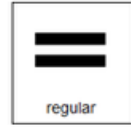
- One is errorless
- One has wrong answers mixed in students will have to set aside.



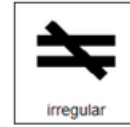
polygons



not



regular



irregular

Sorting activity 1: A grid of 12 boxes containing various shapes for classification. The shapes include: a square with three vertical lines (straight sides), a diamond (closed), a six-pointed star (complex), a concave pentagon (concave), a convex pentagon (convex), a square, a rectangle, an octagon, a circle, and a convex pentagon.

Sorting activity 2: A grid of 12 boxes containing various shapes for classification. The shapes include: a concave pentagon (concave), a diamond with three equal sides (equal sides), a circle, a rhombus, a diamond, a circle, and a pentagon with unequal sides (unequal sides).

Sorting activity 3: A grid of 12 boxes containing various shapes for classification. The shapes include: a concave pentagon (concave), a diamond with three equal sides (equal sides), a circle, a rhombus, a diamond, a circle, and a pentagon with unequal sides (unequal sides).

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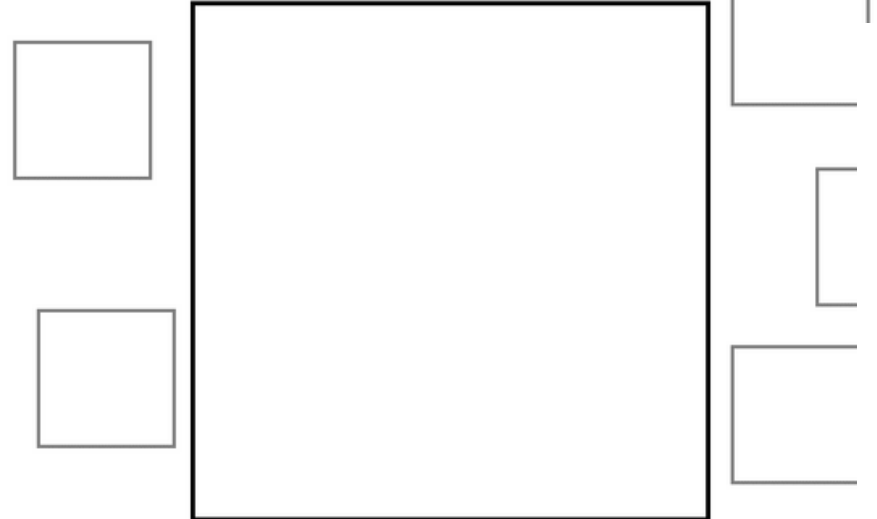
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There are 3 sorting activities.

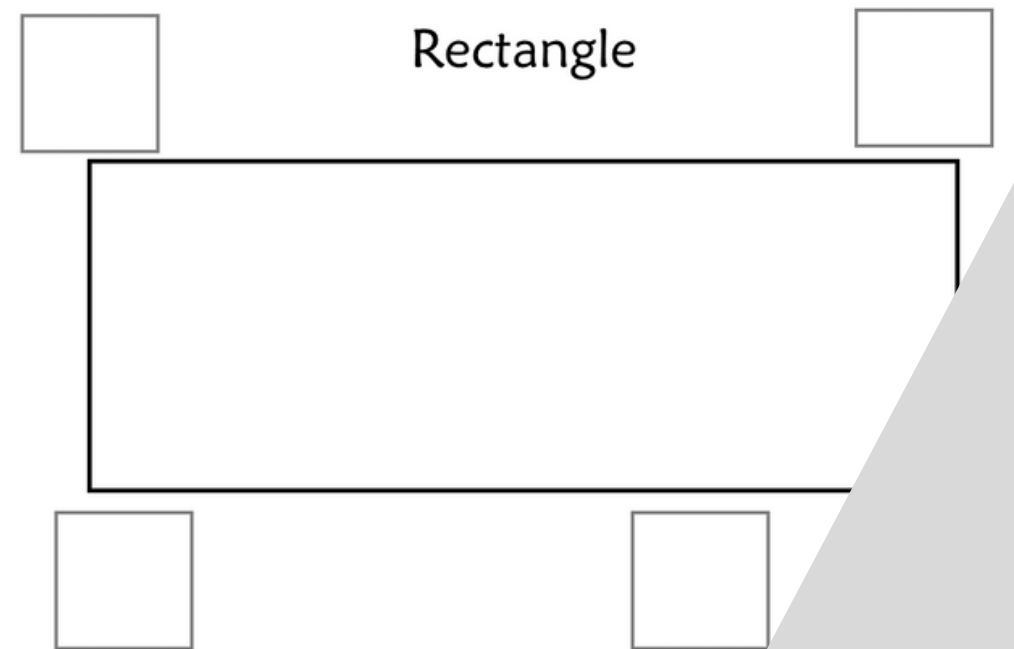
- polygons/not polygons
- regular/irregular polygons
- convex/concave polygons

Square



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Rectangle



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collages

There are 5 shape collages.

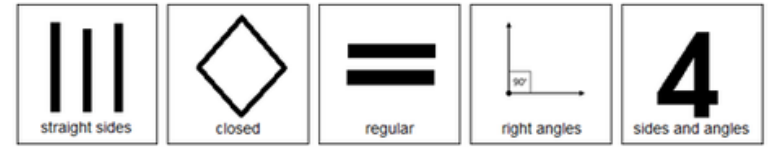
- squares
- rectangles
- parallelograms
- rhombuses
- trapezoids

Each collage comes with an errorless option and an option with wrong answers mixed in.

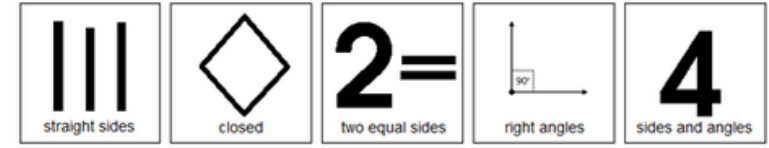
Use the following pictures to complete the shape collage

Errorless

Square

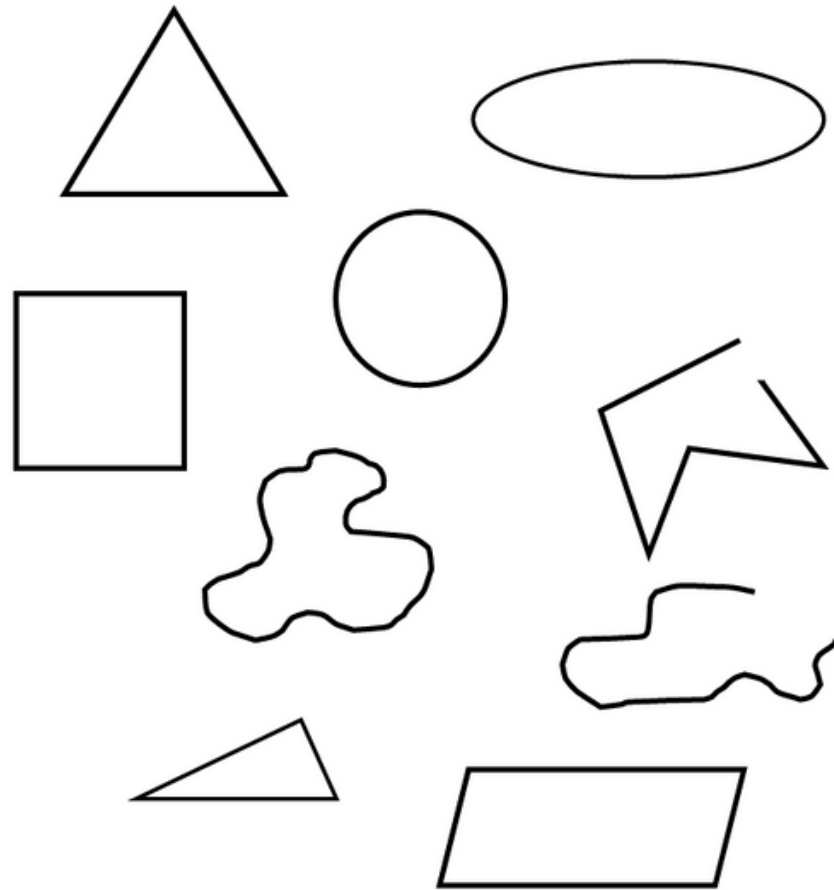


Rectangle



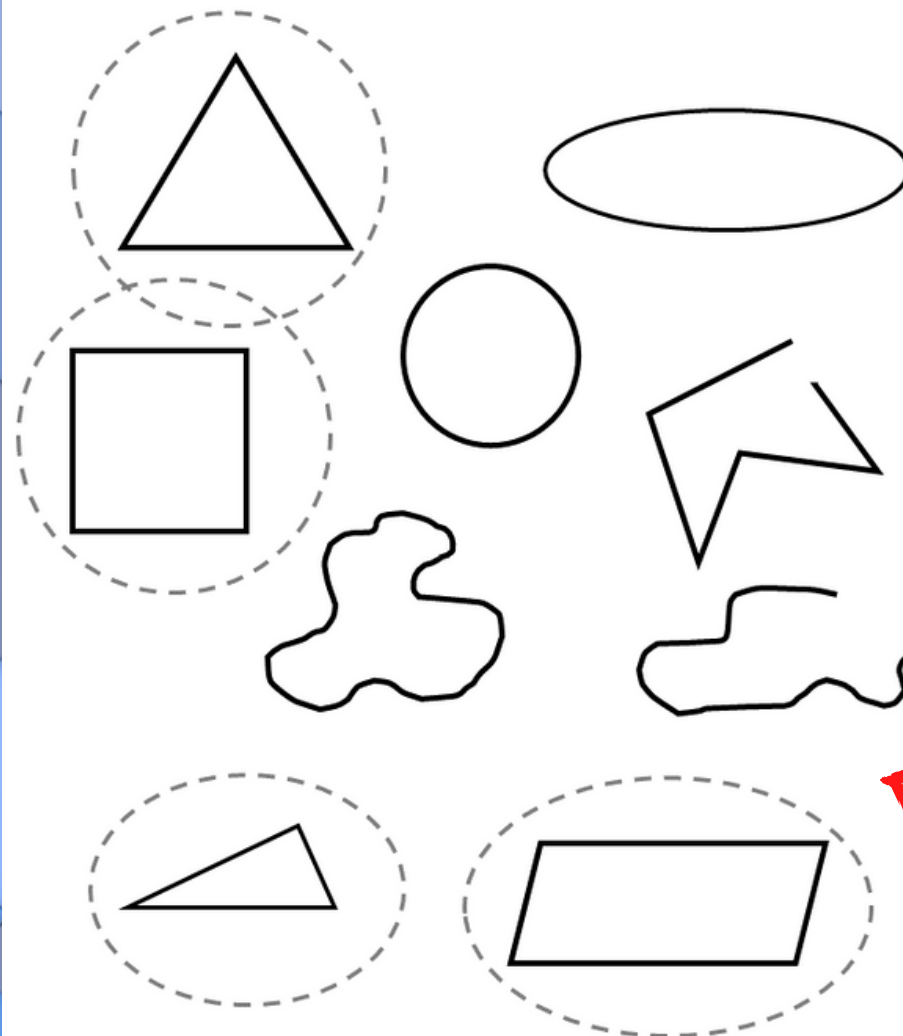
Circle polygons

Find all the polygons.



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Find all the polygons.



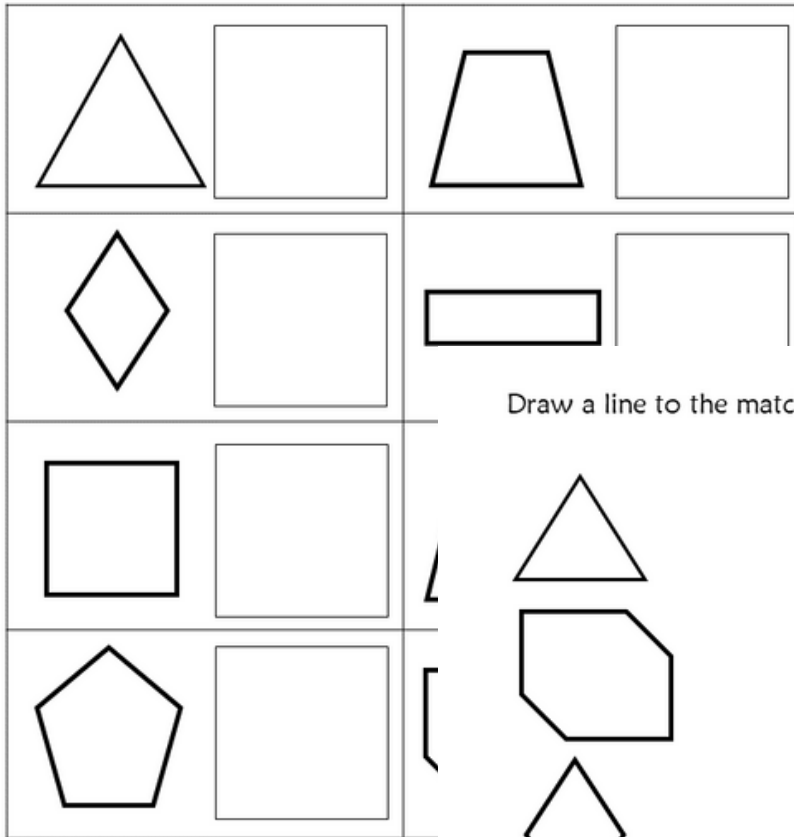
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Students will identify examples of:

- polygons
- quadrilaterals
- squares
- rectangles
- rhombuses
- trapezoids
- parallelograms

Differentiated versions are included.

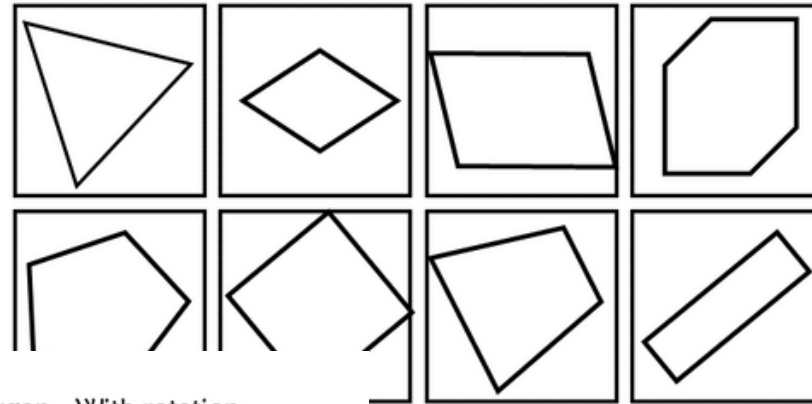
Find the matching polygon.



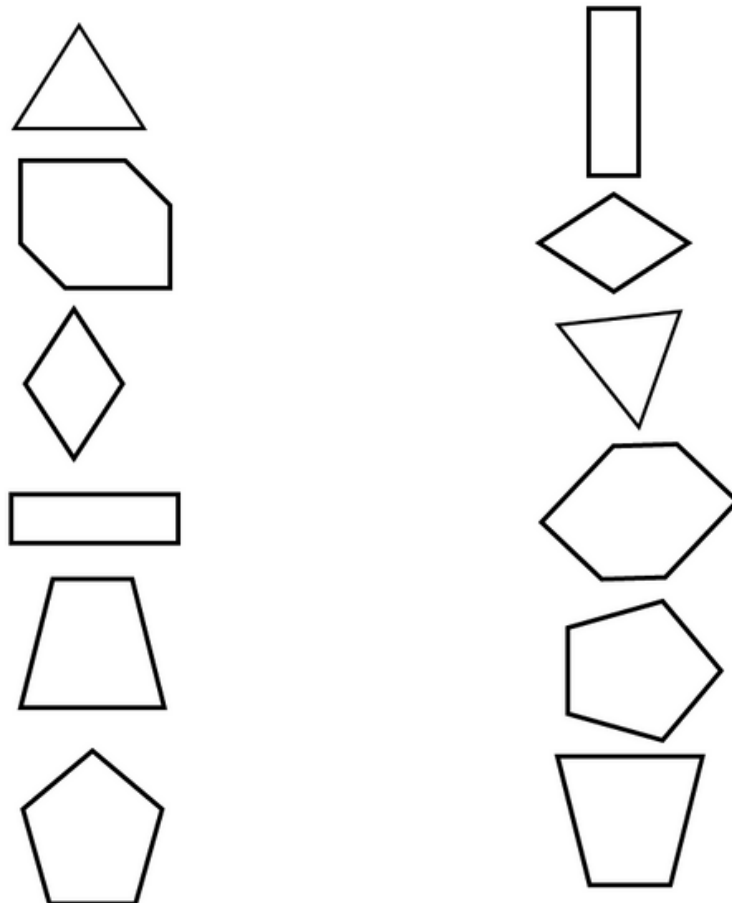
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Match with the polygon on the previous page.

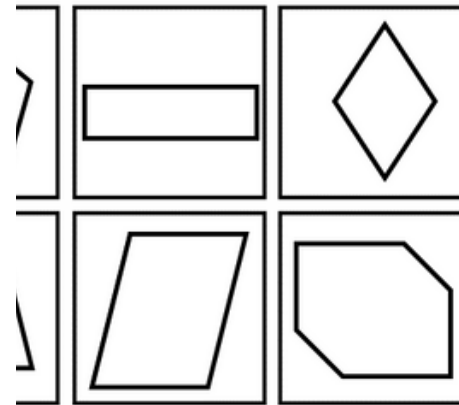
With rotation.



Draw a line to the matching polygon. With rotation.



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Matching with and without rotation

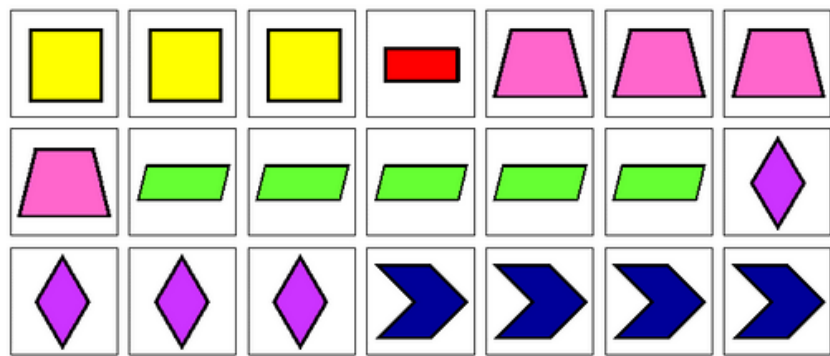
Students will match polygons with and without rotation. There is a cut-and-paste version and one where students draw lines.

Polygons & Quadrilaterals

Polygons & Quadrilateral

There is a Sudoku puzzle in this unit as well. This is a great way to work with the new vocabulary!!

There are 2 versions plus answer keys.



Place the following images in the empty squares on the previous page, completing the sudoku puzzle.

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Quadrilaterals

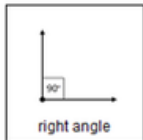
1. All quadrilaterals have sides and angles.

2. A square is a quadrilateral with 4 sides and angles.

3. A rectangle and square both have .

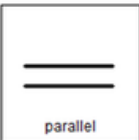
4. Parallelograms have sides that are .

5. A square and a rectangle are both .

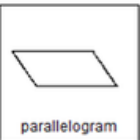


right angle

4

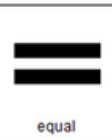


parallel



parallelogram

4



equal

Polygons

1. All polygons have sides.

2. All the sides are .

3. Regular polygons have sides and .

4. Irregular polygons have sides and angles.

5. Complex polygons have sides that each other.



cross



equal



unequal



straight



equal



closed

Quiz

Close worksheets are a great informal assessment. This unit has 2 that review quadrilaterals and 2 that review polygons.

Answer key included.

Version 1

Version 2

Print onto cardstock or mount on index cards. Cut pictures apart and show student answer choices for each question.

1. All quadrilaterals have _____ sides & angles.



2. Circle all the polygons:



3. Regular polygons have sides that are all:



4. Complex polygons, have sides that:



5. Circle all the quadrilaterals:



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Q 1



Q 2

Version 3

1. All quadrilaterals have _____ sides & angles.

- A. 2
- B. 4
- C. 3

2. Circle all the polygons:



3. Regular polygons have sides that are all:

- A. Unequal
- B. Different
- C. equal

4. Complex polygons, have sides that:

- A. Curl
- B. Cross
- C. bend

5. Circle all the quadrilaterals:



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Assessment

FINALLY the assessment!! There are 3 versions.

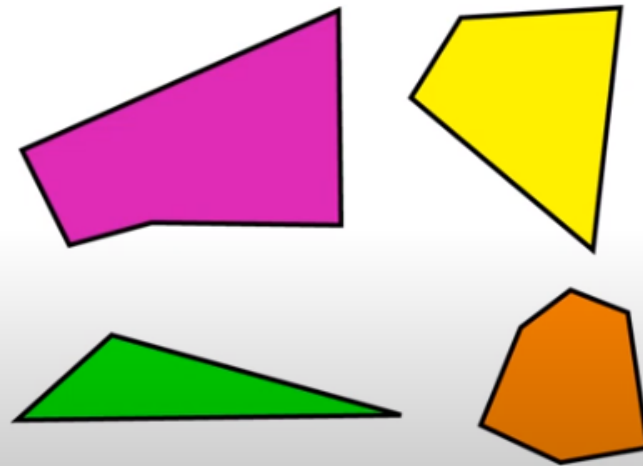
- 10 questions with 3 picture choices for each question
- cut out the answer choices and glue them on index cards
- traditional multiple choice

Answer key included.

Digital Activities

Watch the movie on polygons and quadrilaterals.

Irregular polygons have angles or sides that are **NOT** equal.



This unit also has digital activities. There is a movie version of the book students can listen to read aloud.

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1:55 / 7:57


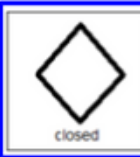

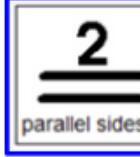


Circle all the rhombuses.

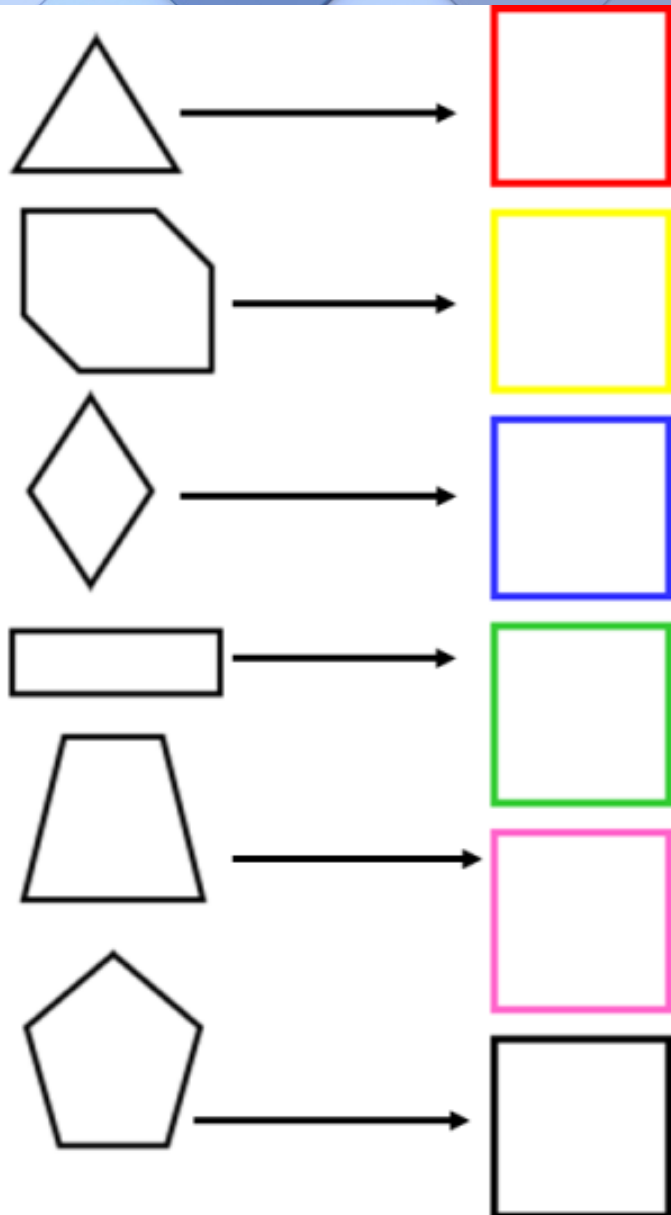
Trapezoid

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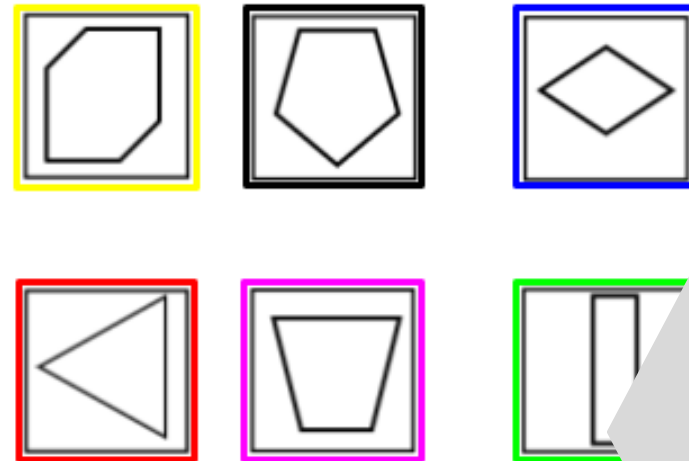
Complete the collage with characteristics about a trapezoid.

 straight sides	 closed
 sides and angles	 parallel sides

The digital activities have students mainly click and drag their answers. There is some typing involved in the set without differentiation.



Match the polygons that are rotated.



The second set of slides is differentiated using color. There is no typing in this set of slides.

This resource comes in a zipped folder. You will need to unzip the folder to access all the contents which include:

- ***14 days of lesson plans***
- ***Polygon activities in color***
- ***Polygon activities in black and white***
- ***Voice-recorded PowerPoint show***
- ***All Polygons and Quadrilaterals book (PowerPoint) to use with activities***
- ***Links and directions to digital activities***

*Save money by getting this unit as part of the
Geometry Bundle*

[Geometry Bundle](#)

