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## Vocabulary

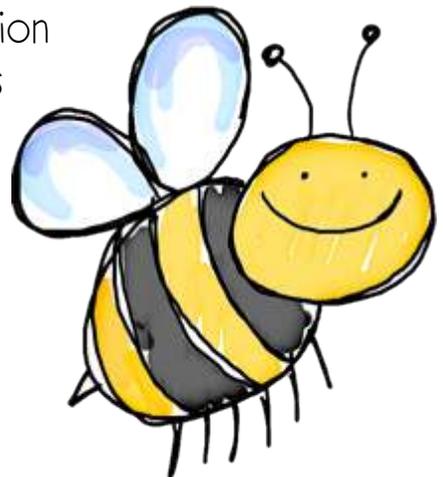
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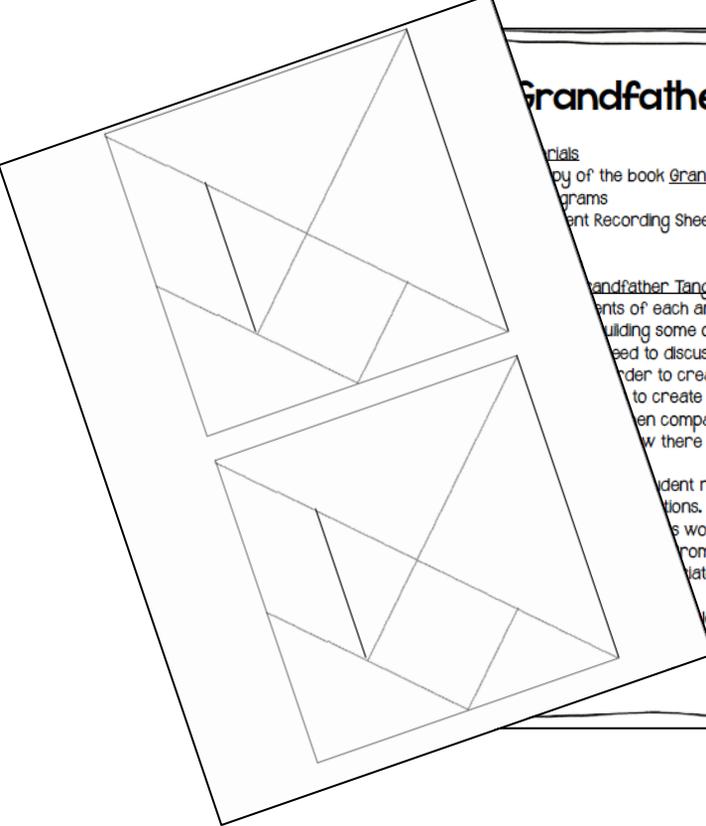
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# Grandfather Tang's Story

Materials  
 Copy of the book *Grandfather Tang's Story*  
 Tangram pieces  
 Student Recording Sheet

Read *Grandfather Tang's Story* and discuss the  
 characters of each animal and ask the students to  
 build some of the shapes with the tangrams.  
 Ask students to discuss how shapes may be turned or  
 flipped in order to create the shapes.  
 Have students to create a square using any number of  
 tangram pieces. Then compare the squares with a partner  
 and discuss how there were different ways to create a

Hand out student recording sheet to the class and  
 discuss the instructions.  
 Have students work in groups to find other shapes  
 that can be made from tangram pieces and sketch  
 them on the student recording sheet.

Encourage students to complete all parts of the  
 recording sheet. Encourage students to find as many



Date \_\_\_\_\_  
 Grandfather Tang's Story  
 Try to make as many different shapes as possible to create the shapes below using tangram  
 pieces. Record how you made the shapes in the appropriate boxes below.






## Geometry Scavenger Hunt

Name \_\_\_\_\_ Date \_\_\_\_\_

**Materials**

- Digital cameras
- Student recording sheet

**Directions**

- This activity can be taught geometrically.
- Distribute the student recording sheet to students and explain the activity.

**Technology Integration**

- Allow students to use digital cameras to take pictures of geometric figures that can be found in the classroom. Be sure to discuss safety. As an extension, have students create a PowerPoint presentation of their findings.

## Geometry Scavenger Hunt

Name \_\_\_\_\_ Date \_\_\_\_\_

Shape	I found an example of this shape...
rectangle	
parallel lines	
trapezoid	
perpendicular lines	
kite	
pentagon	
rhombus	
hexagon	

## Robot

Name \_\_\_\_\_ Date \_\_\_\_\_

Create an alien from another planet. You will need to use geometric shapes to create the robot. When you finish with the robot, describe what his special talents and abilities are. Below describe his geometric features.



## Robot Glyph

Name \_\_\_\_\_ Date \_\_\_\_\_

My favorite subject is...

**Body of Robot**

- Boy-square
- Girl-rectangle

**Legs of Robot**

- 7 years old-7 inches long
- 8 years old-8 inches long
- 9 years old-9 inches long
- 10 years old-10 inches long

**Feet of Robot**

- Brown eyes-hexagons
- Blue eyes-pentagons
- Green eyes-octagons
- Hazel eyes-circles

**Neck of Robot**

- Reading-trapezoid
- Writing-rectangle
- Math-equilateral triangle
- Social Studies-isosceles triangle
- Science-scalene triangle

**Head of Robot**

Any shape with...

- 0 pets-0 acute angles
- 1 pet-1 acute angle
- 2 pets-2 acute angles
- 3 pets-3 acute angles
- 4 or more pets-4 acute angles



# Geometry Zoo



You have been chosen to design a new zoo for your community. However, your zoo must be a geometric zoo, so it will have to have specific polygons and lines within the zoo.

- Two of the paths in your zoo must be parallel lines. Color these lines yellow.
- Two of the paths in your zoo must be perpendicular lines. Color these lines red.
- The tigers should be in a rectangular pen.
- The giraffes should be in a square pen.
- Place the elephants in a pen that is a hexagon.
- Make sure the zebras are in a pen that is a trapezoid.
- You can use a pentagon for the lion's pen.
- The crocodiles should be in an octagonal pen.
- Place the monkeys in a pen that is an equilateral triangle.
- Make sure the kangaroos are in a pen that is an isosceles triangle.
- Put the hippos in a pen that is a scalene triangle.

After you build your zoo, add details like restaurants, restrooms, seating areas, etc. to make your zoo as appealing as possible. Be sure to draw all of the animals in their pens and add as many details as possible. Be sure to draw a plan for your zoo on scrap paper before starting your zoo. You will need to draw your zoo on a large sheet of bulletin board paper, so you will have plenty of room for all the animals!

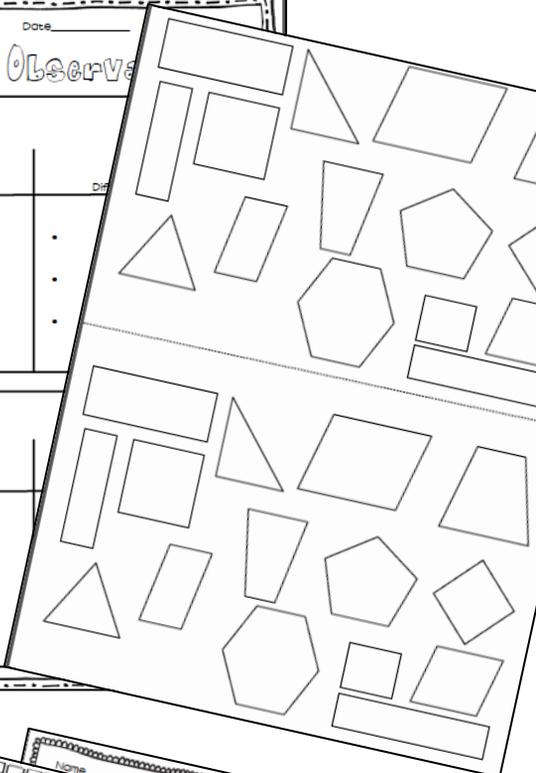
Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Geometric Observations

Similarities	Differences
•	•
•	•
•	•

Similarities	Differences
•	•
•	•
•	•



## Can You Find It?

### Materials

- Student recording sheet

### Directions

- The purpose of this activity is to discover irregular quadrilaterals other than rectangles.
- Students should use the student recording sheet to record their findings.
- Remind students that the purpose of this activity is to discover regular polygons.
- Students should also use the student recording sheet to record their findings.

Name: \_\_\_\_\_

## Can You Find It?

Use the dotted paper below to draw and color the shapes.

- Irregular Pentagon-Red
- Trapezoid-Green
- Irregular Hexagon-Orange
- Rhombus-Blue

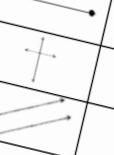
## Types of Lines Sort

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Ray	Line Segment	Parallel Lines	Perpendicular Lines

two lines that intersect and form right angles



two lines in the same plane that never intersect



a part of a line that has two endpoints



has one endpoint and goes on forever in the other direction



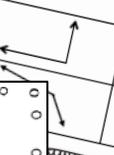
## Types of Angles Sort

Name: \_\_\_\_\_

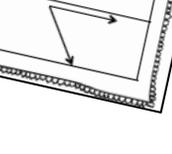
Date: \_\_\_\_\_

RIGHT	OBTUSE

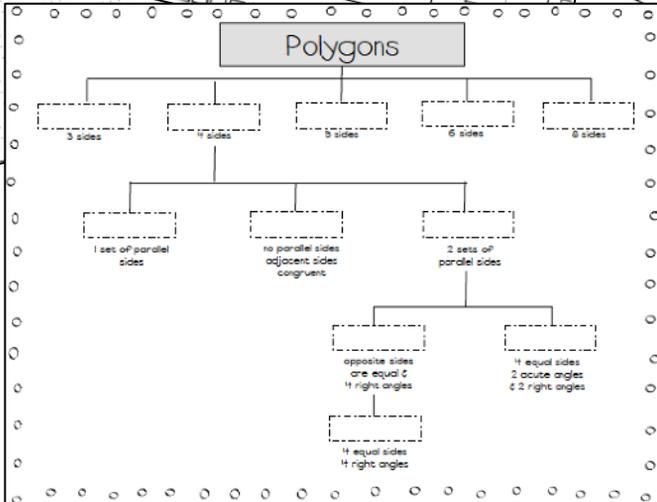
less than 90°



greater than 90°



## Polygons



Name \_\_\_\_\_ Date \_\_\_\_\_

# Make A Shape



Draw a polygon with one right angle and three sides.

Draw a polygon with four equal sides and no right angles.

Draw a quadrilateral with one set of parallel sides.

Name \_\_\_\_\_ Date \_\_\_\_\_

# Describing Quadrilaterals

Describe each of the properties of the quadrilaterals listed below. Use words such as "all" or "at least".

**Square**

Sides \_\_\_\_\_

Angles \_\_\_\_\_

Parallel Lines \_\_\_\_\_

**Rectangle**

Sides \_\_\_\_\_

Angles \_\_\_\_\_

Parallel Lines \_\_\_\_\_

**Trapezoid**

Sides \_\_\_\_\_

**Rhomb**

**Kite**



Name \_\_\_\_\_ Date \_\_\_\_\_

# Geometry Riddles

Directions: Create riddles that describe 5 different geometric shapes. Each riddle must have at least 4 different clues that begin with "I have..." or "I am..." or "ALL..."

Riddles	Geometric Shape
Example: 1. I am a plane figure 2. I am a polygon 3. I have 6 sides 4. All of my angles are obtuse	Hexagon

Name \_\_\_\_\_ Date \_\_\_\_\_

# Geometry Quiz



Match the following definitions with the correct term.

- \_\_\_\_\_ acute angle
- \_\_\_\_\_ line
- \_\_\_\_\_ Celsius
- \_\_\_\_\_ Fahrenheit
- \_\_\_\_\_ equilateral
- \_\_\_\_\_ line segment
- \_\_\_\_\_ hexagon
- \_\_\_\_\_ isosceles
- \_\_\_\_\_ obtuse
- \_\_\_\_\_ parallel lines
- \_\_\_\_\_ right angle
- \_\_\_\_\_ scalene
- \_\_\_\_\_ pentagon
- \_\_\_\_\_ octagon
- \_\_\_\_\_ area

A. 

B. a polygon with 8 sides and 8 angles

C. an angle less than 90°

D. 

Name \_\_\_\_\_ Date \_\_\_\_\_

# Geometry Vocabulary Review Sheet

- Line—a line goes on forever in both directions
- Line segment—a piece of a line with two end points
- Ray—a part of a line with one endpoint and goes on forever in the opposite direction
- Parallel lines—two lines in the same plane that will never intersect
- Perpendicular lines—two lines that intersect and form 90 degree angles
- Acute angle—angle less than 90 degrees
- Right angle—angle that is exactly 90 degrees

90 degrees and less

sides and four 90 degree angles, and

sides, two acute

if parallel sides equal

of itself



Geometry vocabulary

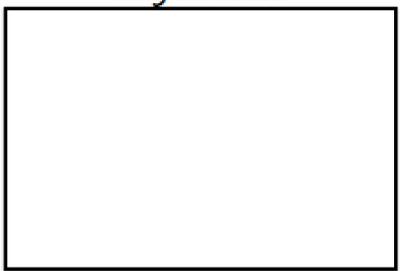
BY \_\_\_\_\_

**Line**

Picture



In my own words...



I have an obtuse angle



Who has a polygon with 5 sides?

I have a pentagon



Who has an angle whose measure is less than 90°?

# I HAVE WHO HAS GEOMETRY

**Preparation**  
Print cards on card stock  
Laminate and cut out cards

**How To Play**  
Distribute each of the cards. Depending on your class size some students may need two cards.  
Have one student begin the game by reading their card.  
Ex: "I have a square. Who has lines that never intersect?"  
The student who is holding the "parallel lines" card should answer by reading their entire card.  
Students should go through each of the cards until they get back to where they started.  
The object of this game is for students to increase their speed and to decrease the amount of time it takes to use each of the cards.



I have a vertex



Who has a closed-in, plane figure with straight lines?

I have a polygon



Who has all four-sided polygons?

I have an acute angle



Who has a triangle with 3 equal sides and 3 equal angles?

I have an equilateral Triangle



Who has a line that passes through the center of a circle?

I have a quadrilateral



Who has a parallelogram with all four sides equal in length, with no right angles?

I have a rhombus



Who has a quadrilateral with exactly one pair of parallel lines?

Plane object that has no endpoints and continues on forever




Distance between two endpoints




## Geometry Concentration

**Preparation:**

- Print cards on card stock
- Laminate and cut out cards



**How to Play:**

- Shuffle all of the geometry cards.
- Lay all of the cards face down on a flat surface.
- Students should take turns trying to find matches by picking two cards up each turn.
- If the two cards are a match, the student gets to keep the set and has another turn.
- If the two cards are not a match, the student should lay the cards down in the same place, and then the turn is over.
- After all of the matches have been found, students should count all of the matches they collected during the game and whoever has the most wins the game.
- This game can be played with partners or small groups.

Triangle with 3 equal sides




Triangle with 2 equal sides




Which shape doesn't belong? Why?



25

Which shape doesn't belong? Why?



Which shape doesn't belong? Why?



27

Which shape doesn't belong? Why?



## Geometry Task Cards

**Materials**

- Task Cards
- Answer Sheet

**Preparation**

- Print and laminate task cards (use cardstock for extra durability)

**Directions**

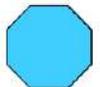
- This makes a great center or work station activity! Have students with a partner to answer a variety of geometry questions.
- If you have not yet taught a particular skill or term, you can remove those cards until your students are ready.
- I encourage my students to review their work with the included answer key. However, I don't give them the answer key until after they've completed the activity.

Identify the figure below.



1

Identify the figure below.



2

Identify the figure below.



3

Identify the figure below.



4