

Drawing for Geometry

What You Need

- number cube
- Recording Sheet



Check Understanding

Draw a shape that has 3 line segments and 3 angles.

What You Do

1. Take turns. Roll the number cube. Read aloud the geometry term for that toss in the table.
2. Draw an example of that term on the **Recording Sheet** and tell why your example represents that term.
3. Your partner draws a different example of the same term.
4. If you roll a number for a term that has already been used, your turn ends.
5. Continue until there are two drawings on the **Recording Sheet** for each of the geometry terms.

Toss	Geometry Term
1	line
2	line segment
3	ray
4	angle
5	perpendicular lines
6	parallel lines

Go Further!

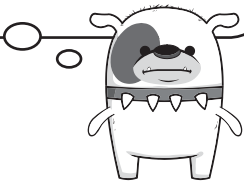
Choose two or more geometry terms from the table. Draw a shape that includes examples of those terms. As you say each term, ask your partner to identify an example in your drawing.



Drawing for Geometry

Partner A	Partner B

I can show a different example of the same geometry term by drawing a different size or facing it in a different direction.



Angles and Circles

What You Need

- 9 game markers in one color
- 9 game markers in a different color
- number cube
- Recording Sheet and Game Board



What is the measure of an angle that turns through $\frac{1}{6}$ of a circle?

What You Do

1. Take turns. Roll the number cube. Read aloud the fraction next to that toss in the table.
2. Find an angle that turns through that fraction of a circle on the **Recording Sheet**. Fill in the blanks below the circle.
3. Your partner checks your answer. If you are correct, cover the angle measure on the **Game Board** with your game marker. If there is more than one correct angle measure, cover only one. If you are not correct or if there are no uncovered matches, your turn ends.
4. The first player with three markers in a row (across, down, or diagonally) on the **Game Board** wins.

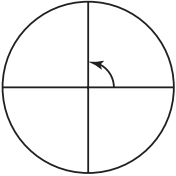
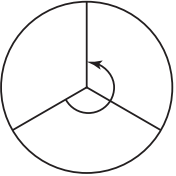
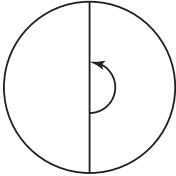
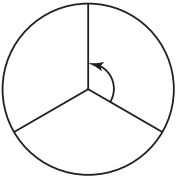
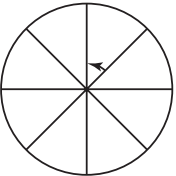
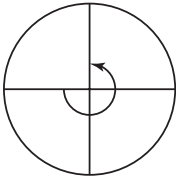
Toss	Fraction
1	$\frac{1}{2}$
2	$\frac{1}{4}$
3	$\frac{1}{3}$
4	$\frac{2}{3}$
5	$\frac{3}{4}$
6	$\frac{1}{8}$

Go Further!

Choose three circles on the **Recording Sheet**. Find the measure of the angle that does not show a curved arrow. Trade papers with your partner to check each other's work.



Angles and Circles

 _____ of the circle _____ of 360 degrees _____ degrees	 _____ of the circle _____ of 360 degrees _____ degrees	 _____ of the circle _____ of 360 degrees _____ degrees
 _____ of the circle _____ of 360 degrees _____ degrees	 _____ of the circle _____ of 360 degrees _____ degrees	 _____ of the circle _____ of 360 degrees _____ degrees

45 degrees	270 degrees	240 degrees
90 degrees	45 degrees	180 degrees
180 degrees	120 degrees	90 degrees

Triangle Vocabulary Match

What You Need

- Recording Sheet



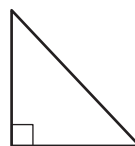
Check Understanding

Use two triangle names from the **Recording Sheet** to describe a triangle with two sides the same length and three acute angles.

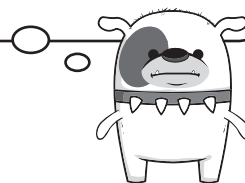
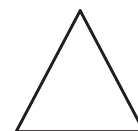
What You Do

1. Pick a triangle name on the **Recording Sheet**.
2. Say the name and describe an example.
3. Your partner describes a non-example and explains why it is a non-example.
4. Draw a line to the definition.
5. Take turns until all the triangle names have been used.

A right triangle has one right angle. Example:

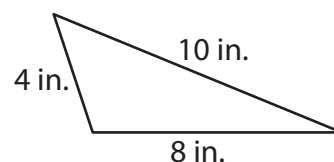


This triangle is a non-example because it does not have a right angle.



Go Further!

Write a triangle name from the **Recording Sheet** that could describe this shape. Your partner writes a different name that could also describe the shape. Check each other's answers. If there is still time, draw different examples of the triangle names on the **Recording Sheet**.



Triangle Vocabulary Match

Triangle Names

scalene triangle

right triangle

equilateral triangle

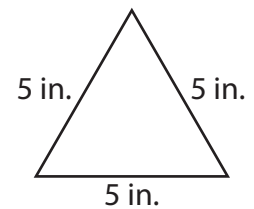
obtuse triangle

isosceles triangle

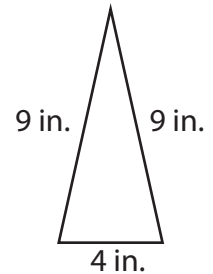
acute triangle

Definitions

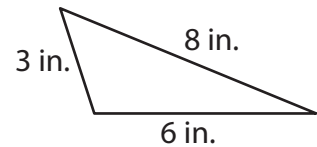
a triangle with all
three sides the same
length



a triangle with at
least two sides the
same length



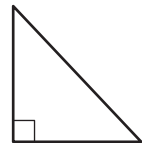
a triangle with no
sides the same length



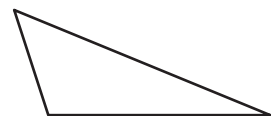
a triangle with three acute
angles



a triangle with one
right angle



a triangle with one
obtuse angle



Classifying Shapes

What You Need

- Recording Sheet


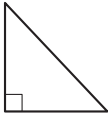
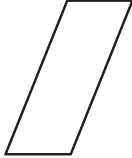
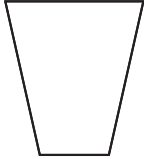
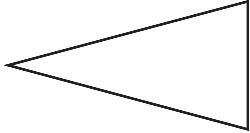



Check Understanding

Which shapes in the table have at least one obtuse angle and at least one pair of parallel sides? Name the shapes.

What You Do

1. Take turns. Pick a letter.
2. Classify the shape for that letter by drawing the shape in one or more columns on the **Recording Sheet**.
3. Your partner checks the answer.
4. Continue until every letter has been used.

A		Pentagon
B		Right Triangle
C		Parallelogram
D		Trapezoid
E		Isosceles Triangle
F		Rectangle



Draw a shape that is not shown above. Your partner classifies the shape on the **Recording Sheet**.



Classifying Shapes

Shapes with at Least One Pair of Parallel Sides	Shapes with at Least One Pair of Perpendicular Sides	Shapes with at Least One Acute Angle

I know that some of the shapes belong in only one category. Other shapes belong in two or more categories.

