

# A Typical Geometry Unit gets "Inspired"

## Learning Outcome

Identify and describe points, lines, line segments, rays and angles.

Identify right angles.

Identify properties of polygons.

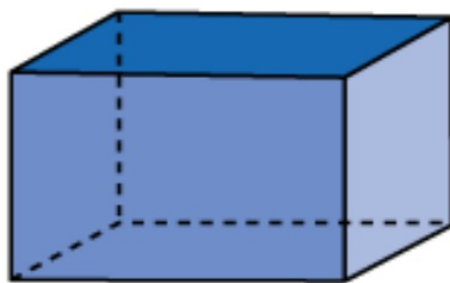
Describe the movement of geometric figures.

How do you teach it now?

How could ActivInspire support?

## Warm Up

4. How many edges does the figure have?



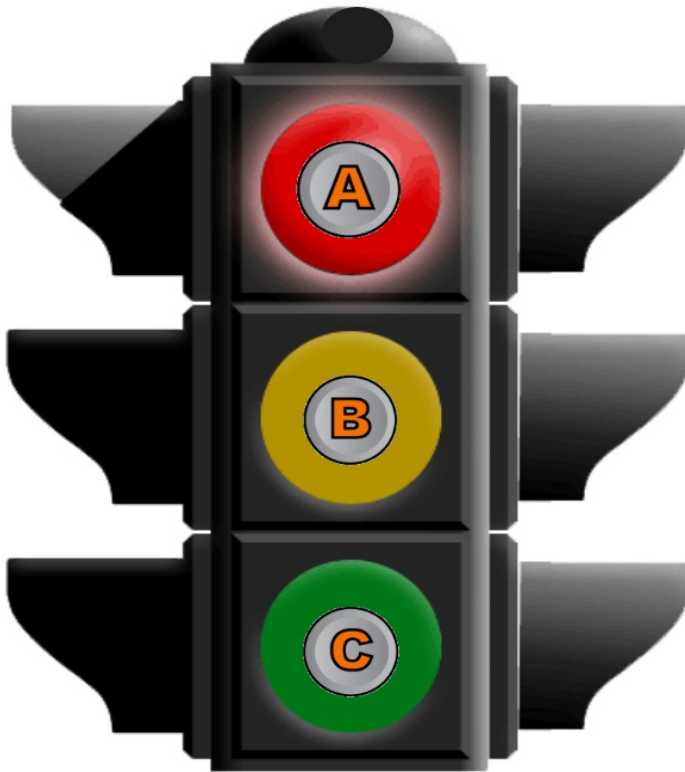
☐ A. 4

☐ C. 12

☐ B. 8

☐ D. 10

# Revisiting our objective....



I would like more help with this.

I think I understand, but I need more practice.

I understand and can work independently.





Knowledge of Geometry

Cluster 3.6



# Essential Questions



How can geometric figures be described and classified?

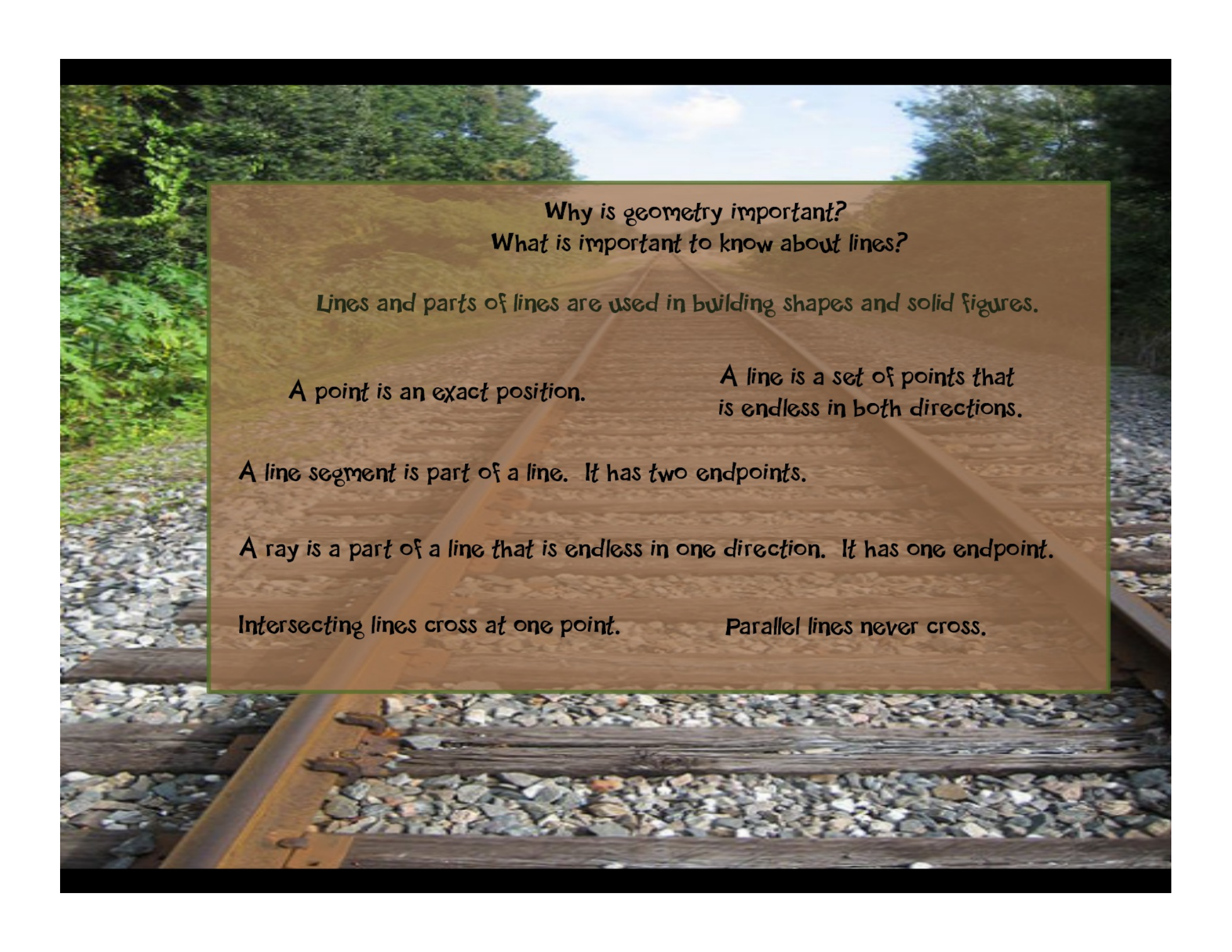


What attributes would be needed to construct these figures?



How can the movement of a figure be described?





Why is geometry important?  
What is important to know about lines?

Lines and parts of lines are used in building shapes and solid figures.

A point is an exact position.

A line is a set of points that  
is endless in both directions.

A line segment is part of a line. It has two endpoints.

A ray is a part of a line that is endless in one direction. It has one endpoint.

Intersecting lines cross at one point.

Parallel lines never cross.

# Geometry Vocabulary

Benchmark: Identify and describe points, lines, line segments, rays and angles.

Now it's your turn! Use the pen tool to draw a picture of each item.

Drag the items out from the image to place them in the right box.

Point

Line

LineSegment

Ray

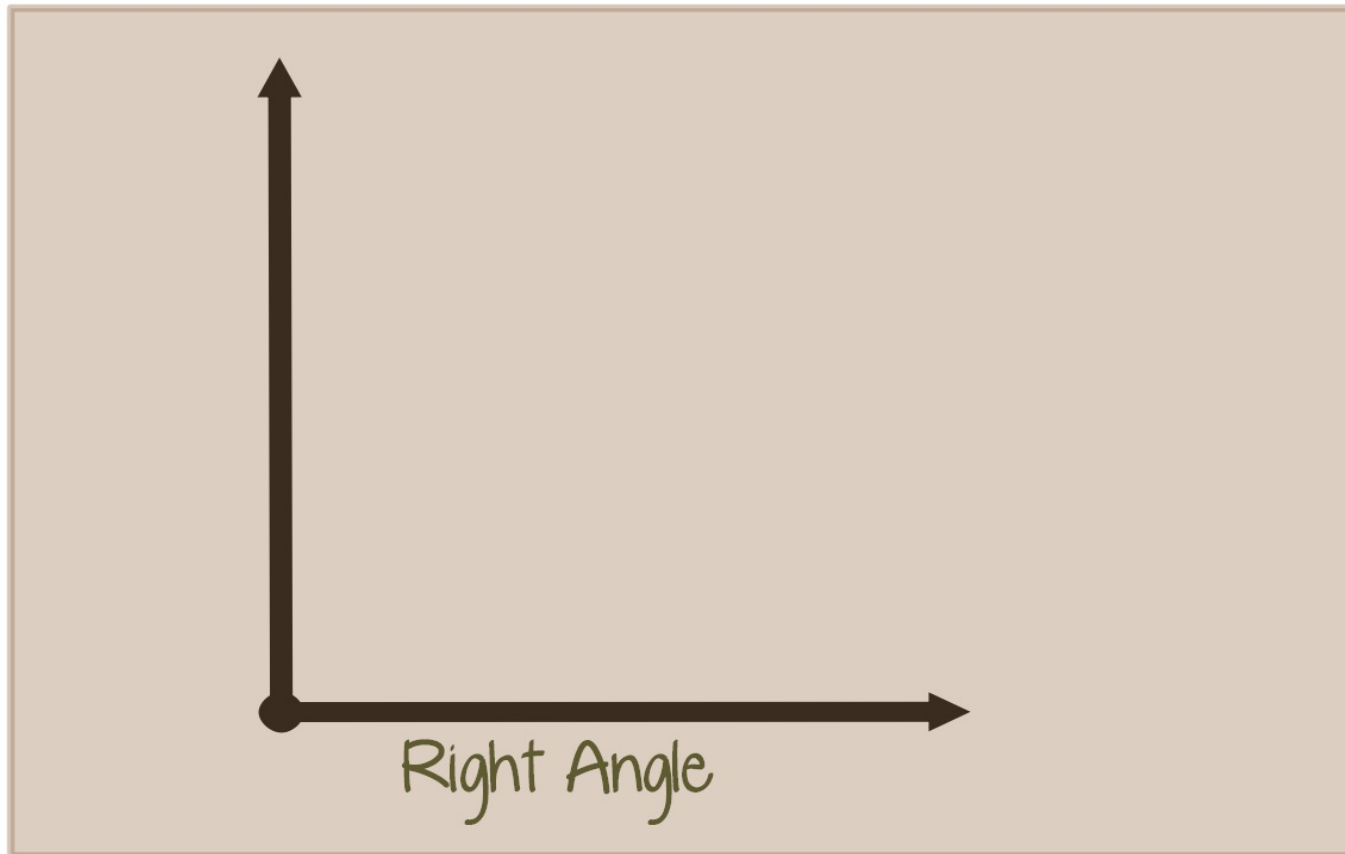
Angle



# Types of Angles

Benchmark: Identify right angles.

An angle is made by two rays that have the same endpoint.  
That endpoint is called the vertex of the angle.

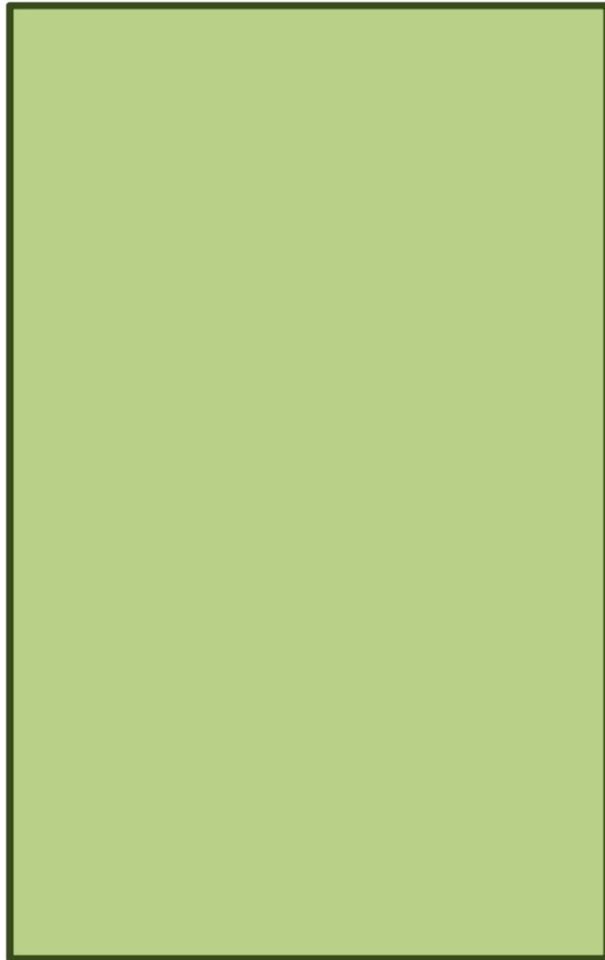




# Types of Angles

Benchmark: Identify right angles.

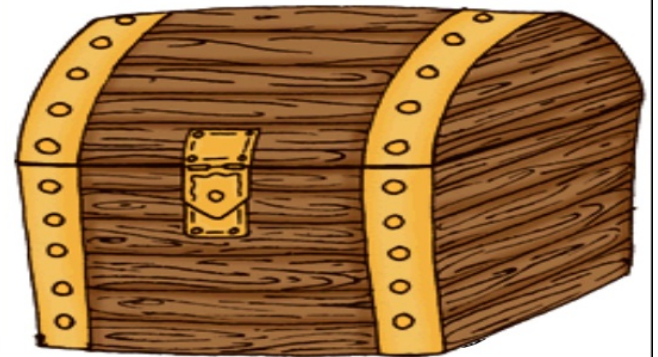
Right Angles



Not Right Angles

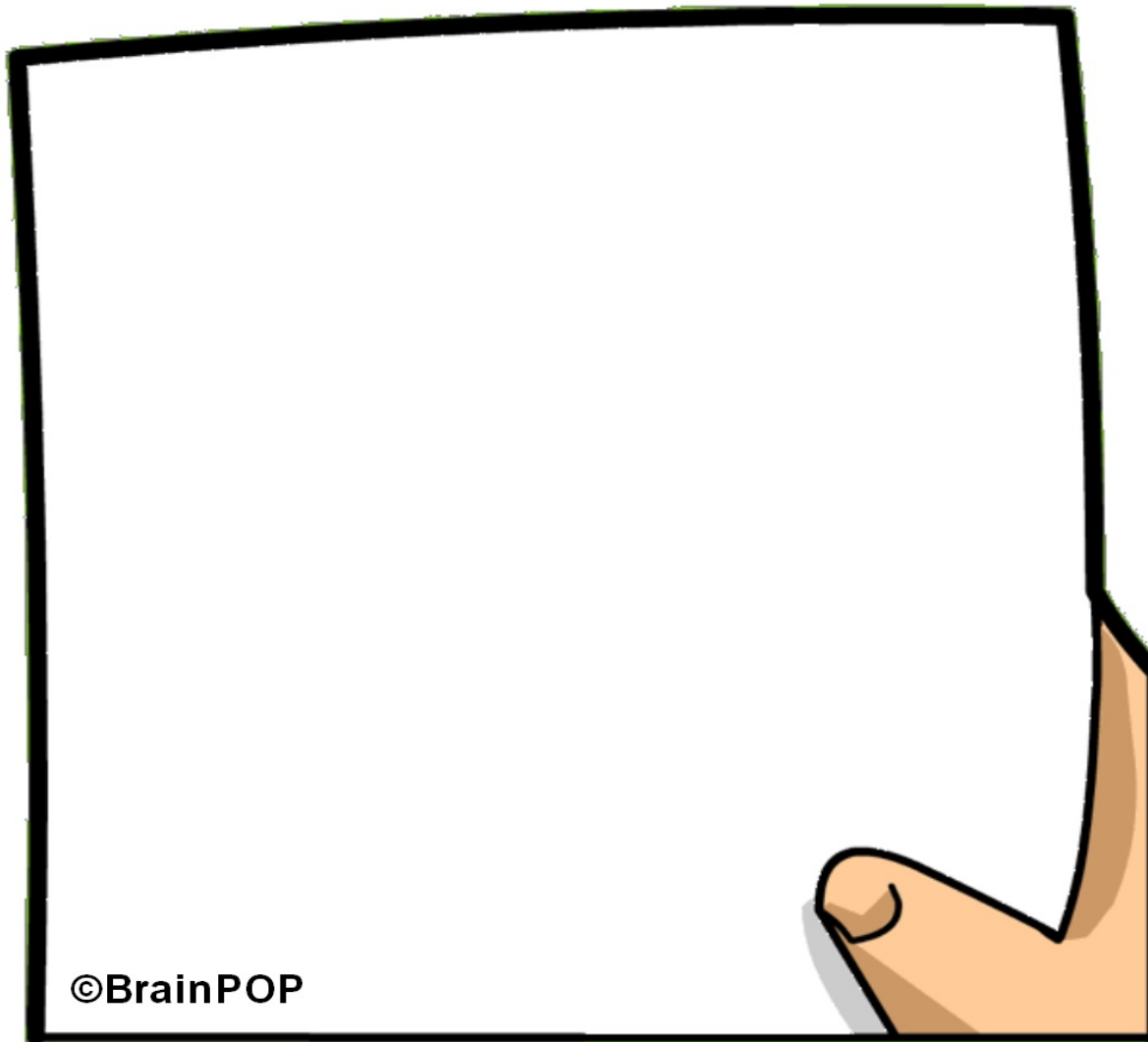


- A** Right angle
- B** Not a right angle

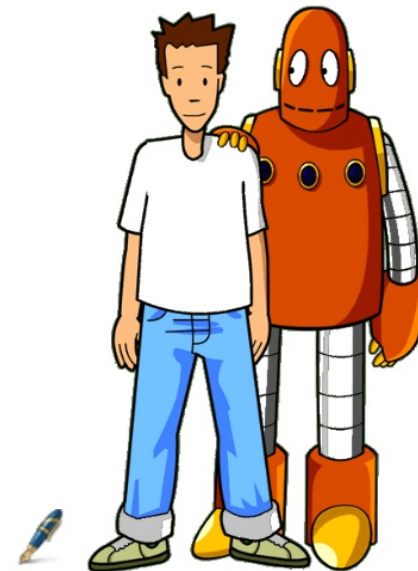


# Polygons

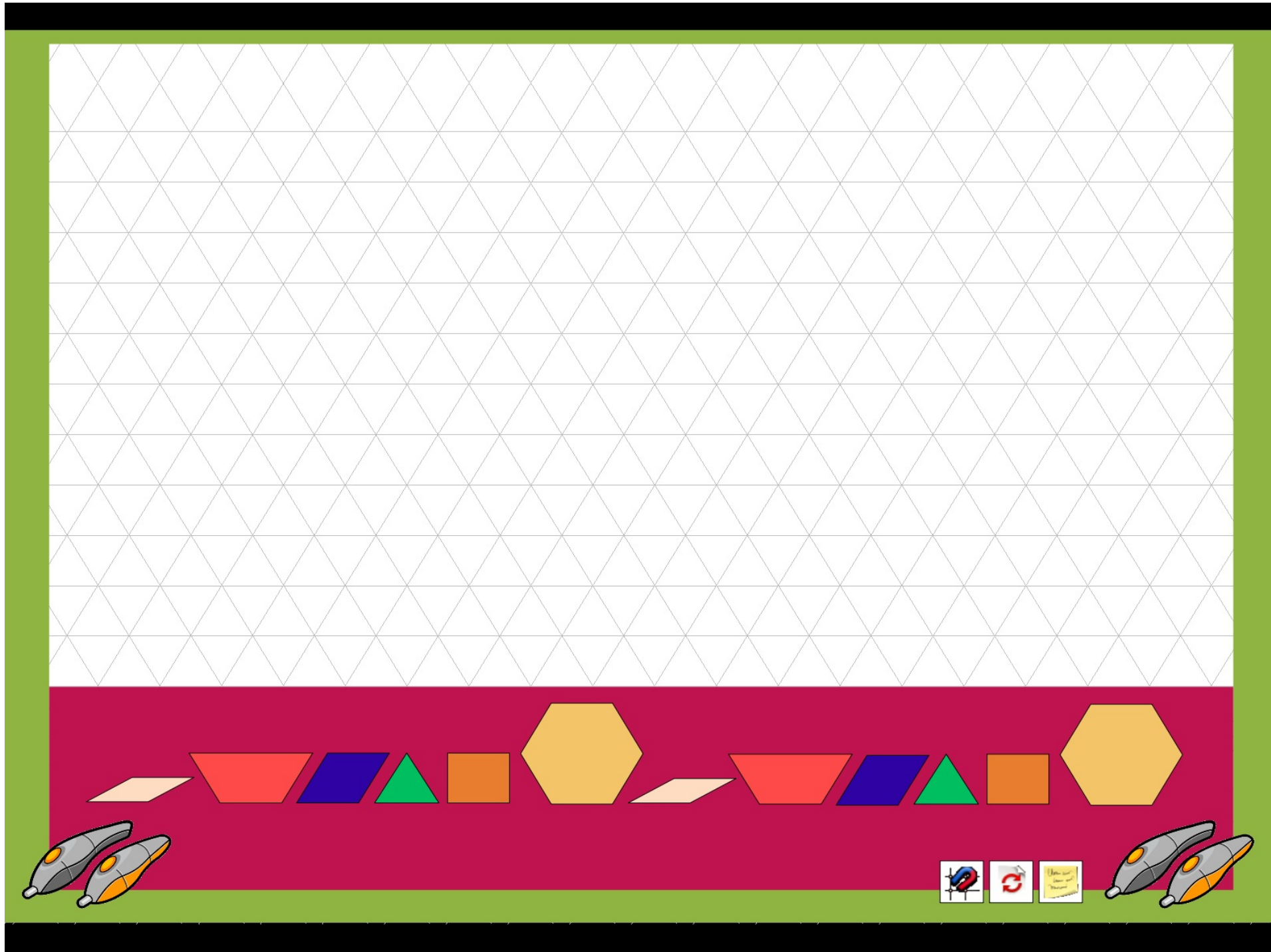
What is a polygon and what are its attributes?



©BrainPOP



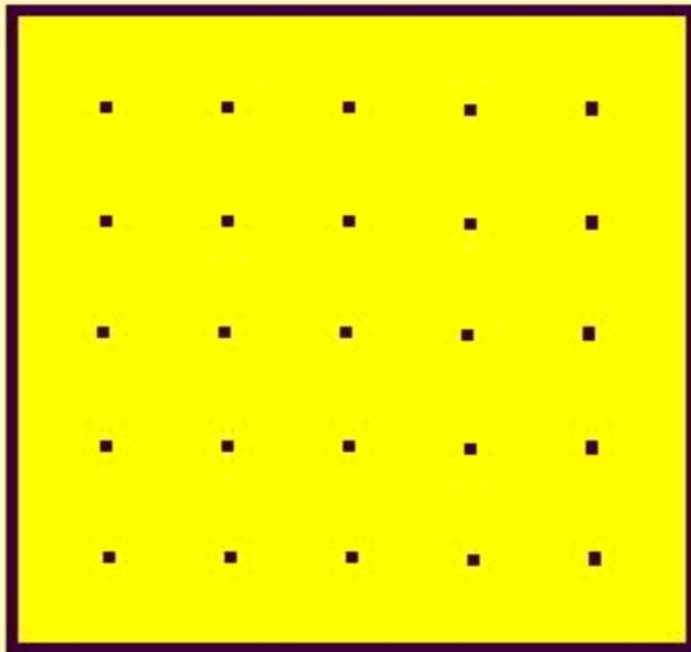
©BrainPOP





## How are polygons named?

Use the lines in the shape tool to draw an example of each polygon. Record your answers.  
Use the magnifying glass to check your work.



Erase



Polygon	# of Sides	# of Angles	# of Vertices
triangle			
quadrilateral			
pentagon			
hexagon			
octagon			

# Congruent Figures

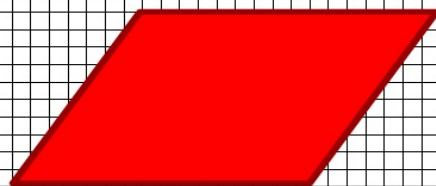
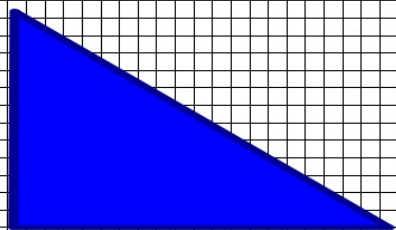
Directions: Drag a copy of each figure. Create an example of a slide (translate), turn (rotate), and a flip (reflection) for each figure.



Translation

Rotation

Reflection





shapes



templates



remove



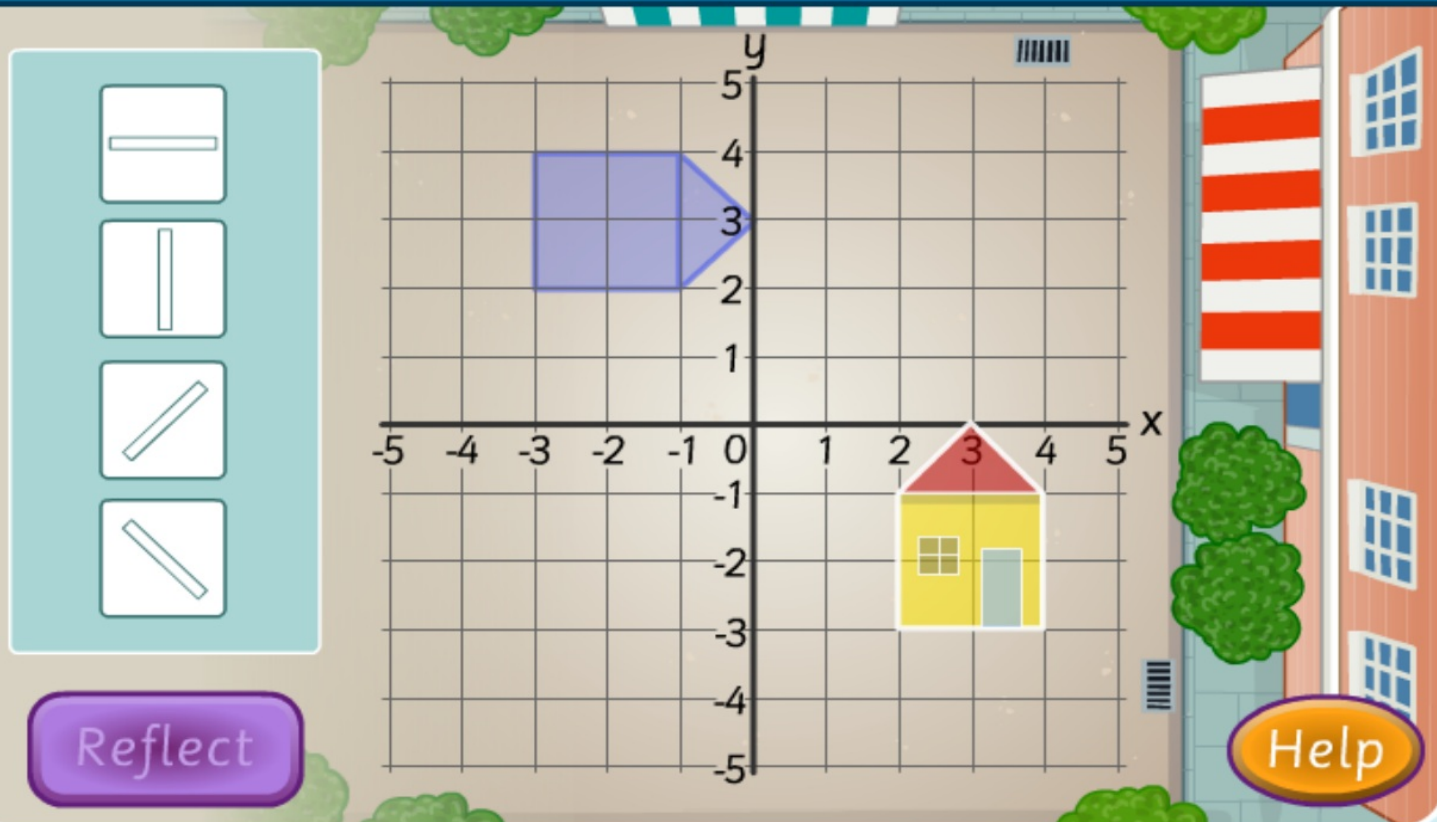
reset





# Time to put it all together!

Try to reflect the house onto its shadow by choosing a mirror line and dropping it onto the right place on the grid.



# Credits and Resources

## Images:

### Railroad Tracks:

[http://commons.wikimedia.org/wiki/File:CSX\\_Tracks\\_east\\_of\\_US\\_19.jpg](http://commons.wikimedia.org/wiki/File:CSX_Tracks_east_of_US_19.jpg)

### All Other Items:

Resource Library, Resource Packs -  
Activities, Backgrounds, Geometry, BrainPop  
Camera Tool - images from websites linked to

**Author: Kelly K Hammond**  
**Staff Development Facilitator**  
**Carroll County Public Schools**