



Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences –particularly students of color and girls – by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at www.projectexploration.org/stemathome.

In this activity, you will:

Observe geometry around you and all over the world!



Supplies Required:

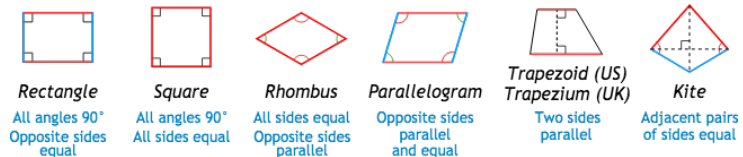
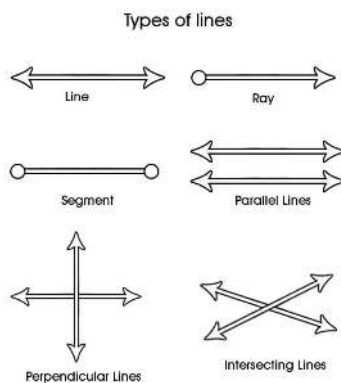
Internet

Video

What are geometric shapes? <https://tinyurl.com/zsdcf9m>
 What are geometric angles and lines? <https://tinyurl.com/hg3edk4>

Overview

In geometry, there are special terms for different types of lines, angles, and shapes. Take a look at a few of them below. We can see these shapes all around us, especially when we look at maps.



<p>Acute angle</p> <p>An angle which measures more than 0°, but less than 90°.</p>	<p>Right angle</p> <p>An angle which measures exactly 90°.</p>
<p>Obtuse angle</p> <p>An angle which measures more than 90°, but less than 180°.</p>	<p>Straight angle</p> <p>An angle which measures exactly 180°.</p>

Instructions

1. Go to maps.google.com.
2. In the upper left hand corner, there is a search box. Enter a city that you've always wanted to go to (Los Angeles? Paris? Tokyo?), or just type in your home address! Make sure to press enter.
3. Zoom in and out with the + and - signs in the bottom right. Zoom in or out until you can see even the small streets.
4. Look for geometric lines, angles, or shapes in the map. Look at the terms on the previous page if that is helpful. For example, do you see any roads forming parallel lines? What about right angles? Take a screenshot once you do!
5. Once you've found three geometric terms, enter a different place and keep looking!

Additional Resources

Think About It! Geometry is all around you--what other forms of math do you see every day? Engineers use math when they design and build. What types of geometric shapes and angles would they use in skyscrapers? What about in a stadium dome?

1. What do civil engineers do? <https://tinyurl.com/ycpsgtpp>
2. Listen to this geometry rap: <https://tinyurl.com/ybkj2jk8>
3. Where do we see geometry in architecture? <https://tinyurl.com/yx94c42z>

Share It Out

Share on social media: Challenge a friend to a competition! Go to the same city and see who can spot the most geometric lines, shapes, and angles. Make sure that everyone is taking screenshots of their maps when they find something! Share your results using the hashtags:

#GeometryMaps
#ProjectExploration
#StemAtHome

Share via PE's website: Students who complete STEM@home activities and share what they learned with the PE team via our website will earn points which can be traded in for cash prizes at the Explore Store. Your project number is 230. Learn more at www.projectexploration.org/explore-store

Join PE's character contest!

Design a STEM character who will lead kids through activities and be featured on our website and in our STEMbooks. Cash prizes will be awarded to the top 3 finalists. Learn more at: www.projectexploration.org/character-contest.



Call or text us for help: 312-772-6634



www.projectexploration.org