

# A STEM in the Park Take Home Activity

## STEM in the PARK

Science, Technology, Engineering, and Mathematics



## Tangrams at Home

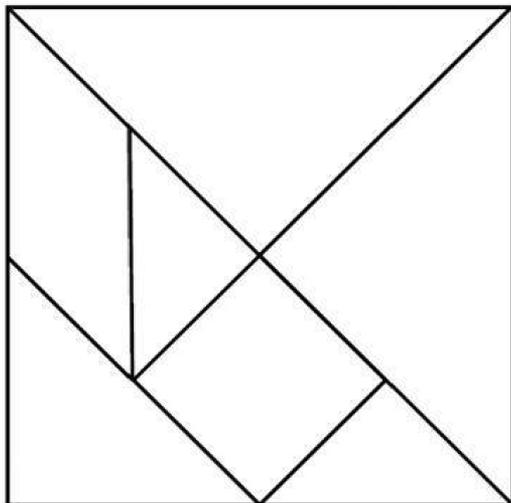
### ***What You Need***

- Simple tangram pattern (Visit <http://math.about.com/od/geometr1/ss/tangram.htm>)
- Several pieces of card stock, colored cardboard or construction paper.
- Scissors

### ***What To Do***

Trace the pattern onto the card stock or cardboard and cut out the pieces.

Can you name the shapes of all of the tangram pieces?



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## **Observe...**

How many ways can you make a square with the pieces?

Can you make a square without using any triangles?

Can you make a square using all seven pieces?

Can you make a trapezoid without using the square piece?

## **Learn...**

Tangram puzzles come from China, but no one knows how old they are. The seven flat pieces, called tans, form a square and are used for making other shapes.

## **Investigate...**

Now that you can make geometric shapes with the tans, try making other things such as animal shapes, rockets, and buildings.

***You can find more information about tangrams on-line:***

### **Making tangrams**

[http://math.about.com/od/tangrams/Tangram\\_Puzzles.htm](http://math.about.com/od/tangrams/Tangram_Puzzles.htm)

### **Tangrams at PBSkids:**

<http://pbskids.org/cyberchase/games/area/area.html>

### **Tangrams at the Library of Virtual Manipulatives:**

[http://nlvm.usu.edu/en/nav/frames\\_asid\\_268\\_g\\_1\\_t\\_3.html?open=activities&from=category\\_g\\_1\\_t\\_3.html](http://nlvm.usu.edu/en/nav/frames_asid_268_g_1_t_3.html?open=activities&from=category_g_1_t_3.html)

### **Tangrams at ABC-ya**

<http://www.abcya.com/tangrams.htm> (Site shows an ad, but the pieces are easy to manipulate.)

***This activity is brought to you by the BGSU Department  
of Mathematics and Statistics***