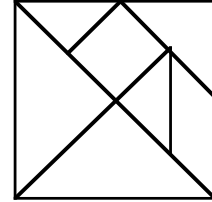


How Do Tangrams Work?

Activity Sheet

One Set of Tangrams

1 Each Shape Sheet shows a shape that can be made by fitting together pieces from your tangrams set. (The diagram at the right shows how a square is cut to make these pieces.) In each case, make the shape by covering it with tangram pieces. Then fill in the first column of the table with the number of each kind of piece you used.



2 Is there another way, different from the one you just found, to make the shape? If so, fill in the second column of the table. How are the columns different? How are they the same? How can you be sure that the new way to make the shape is different from the old?

3 Repeat step 2, if you can, to find three, four, or even more ways to create the shape. For each new way you find, fill in the next table column and answer the questions.

More Than One Set of Tangrams

4 If you use two tangram sets, can you find other ways to make the shape? Try it with sets of different colors, so you can tell them apart. For each new way you find, fill in the next table column (mark them to show that you are using two sets) and answer the questions.

5 If you use three (or more) tangram sets, are there other ways to make the shape?

6 Go on to try other shapes. Make up shapes for other groups to try.

7 When you have finished exploring, please put each tangram set into a separate zip-close plastic bag, seal the bags, and return them.

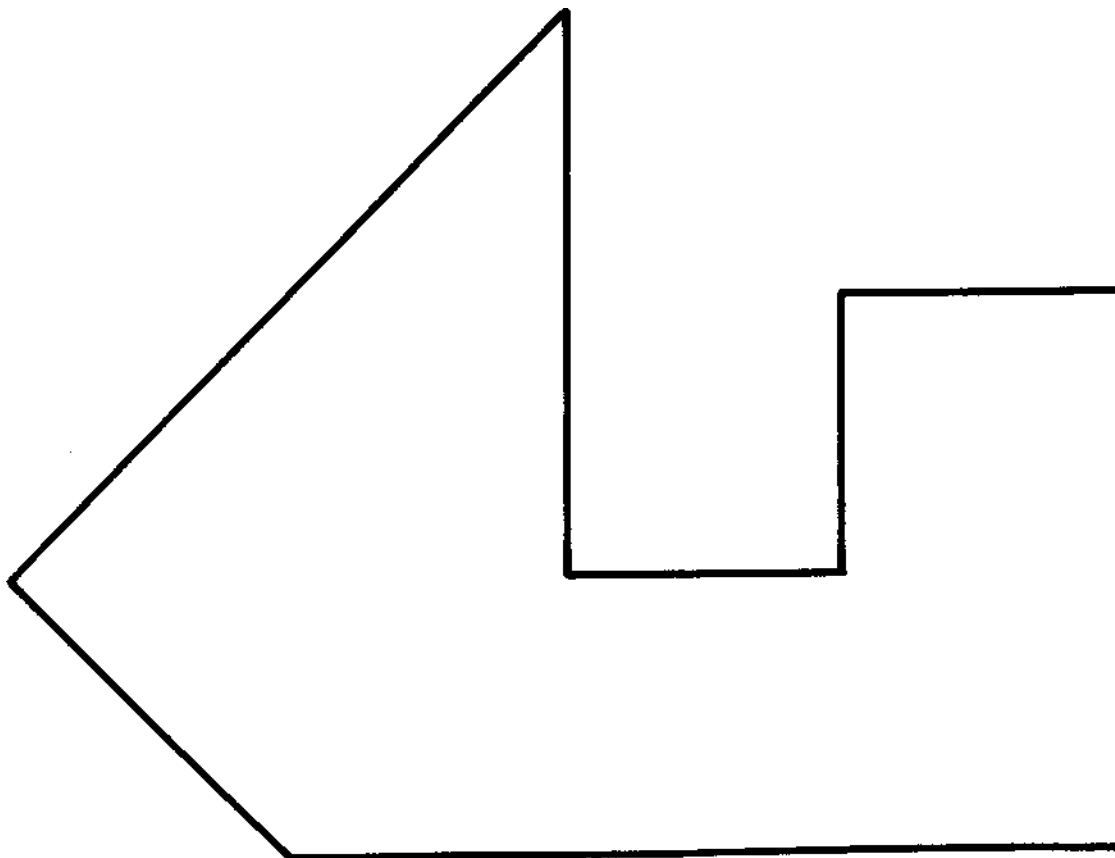
Communicating Science

What do your results tell you about the relationships among the various tangram pieces? Can one shape be made from another (or others)? Is there a basic shape that could be used to make them all? How can you prove your answers? Try it.

How Do Tangrams Work?

Shape Sheet #1

Use the suggestions on the Activity Sheet to guide your explorations.



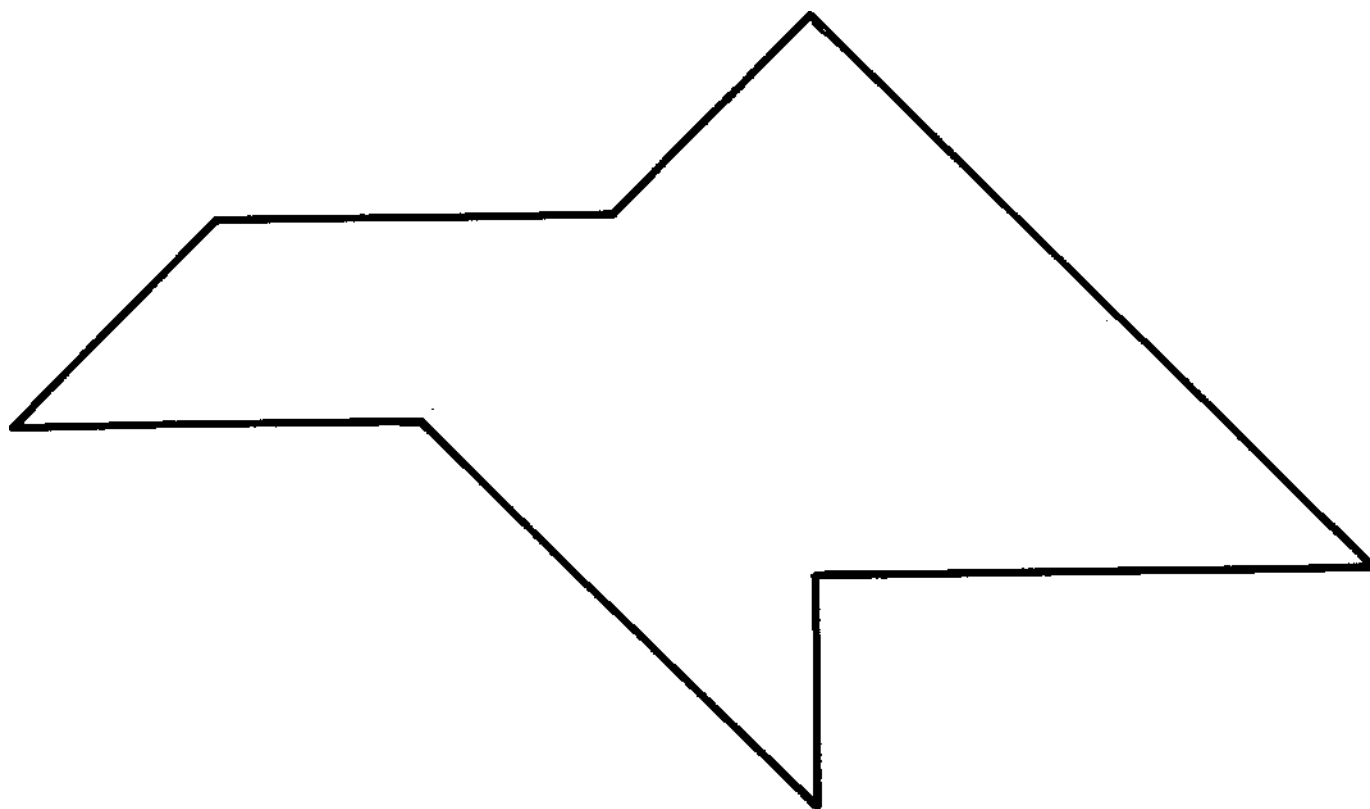
What tangram pieces did you use? How many of each? Fill out the table below.

		Trial #					
		1	2	3	4	5	6
Shape	large triangle						
	medium triangle						
	small triangle						
	parallelogram						
	square						

How Do Tangrams Work?

Shape Sheet #2

Use the suggestions on the Activity Sheet to guide your explorations.



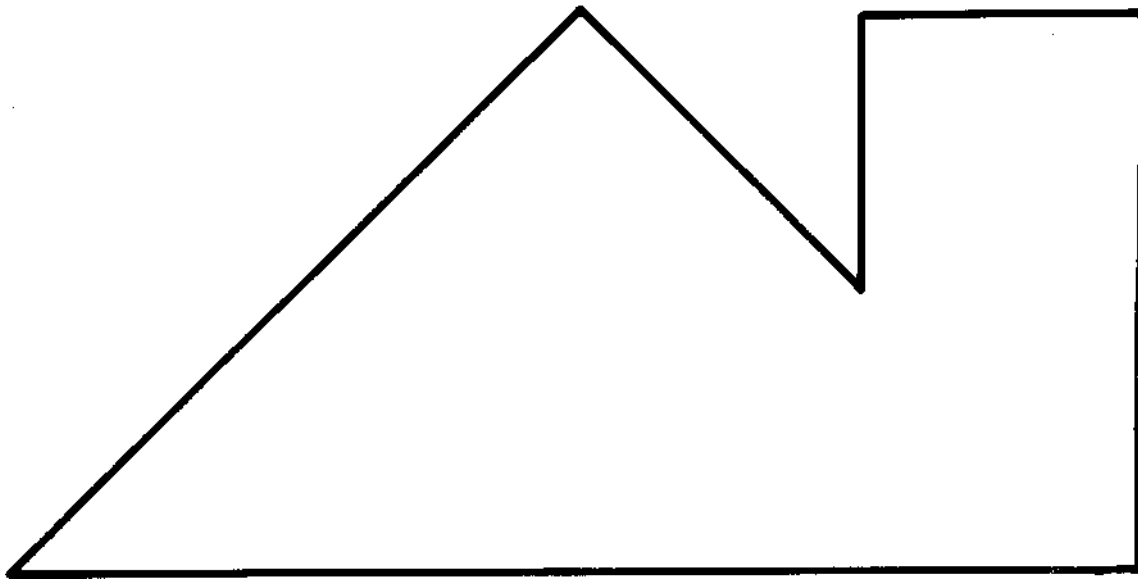
What tangram pieces did you use? How many of each? Fill out the table below.

		Trial #					
		1	2	3	4	5	6
Shape	large triangle						
	medium triangle						
	small triangle						
	parallelogram						
	square						

How Do Tangrams Work?

Shape Sheet #3

Use the suggestions on the Activity Sheet to guide your explorations.



What tangram pieces did you use? How many of each? Fill out the table below.

		Trial #					
		1	2	3	4	5	6
Shape	large triangle						
	medium triangle						
	small triangle						
	parallelogram						
	square						