

Sent in by Sarah H. of Smithfield, IL

# Tangram

How can you arrange these pieces to make a square?

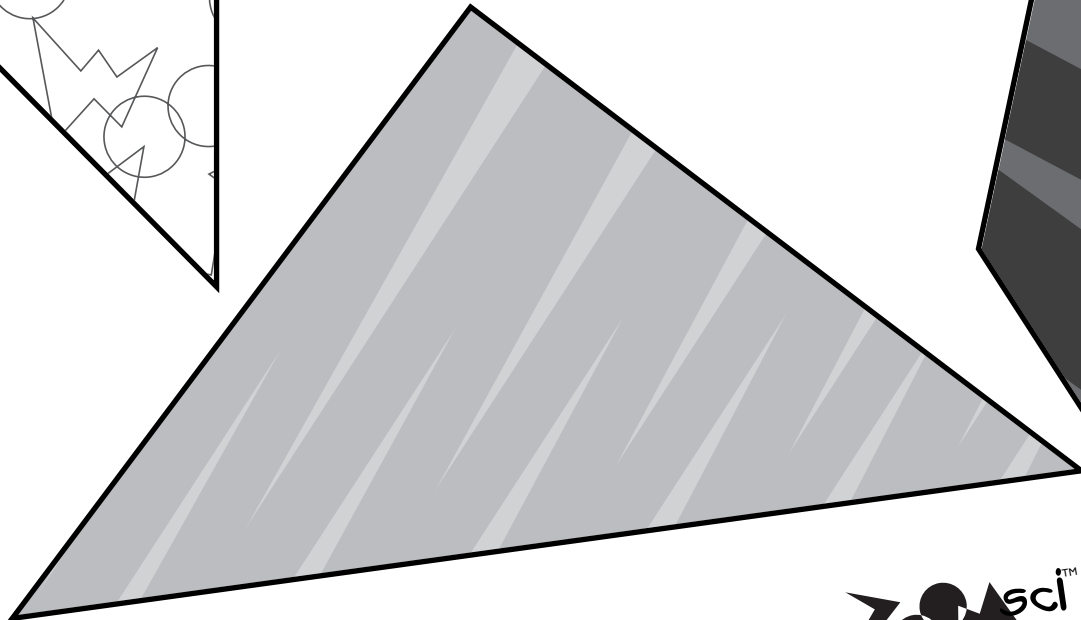
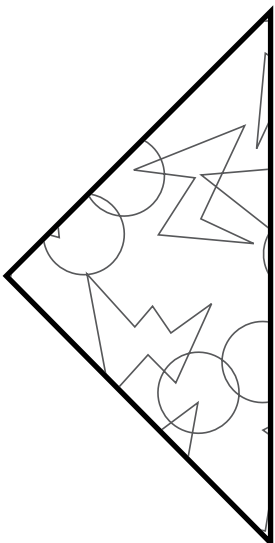
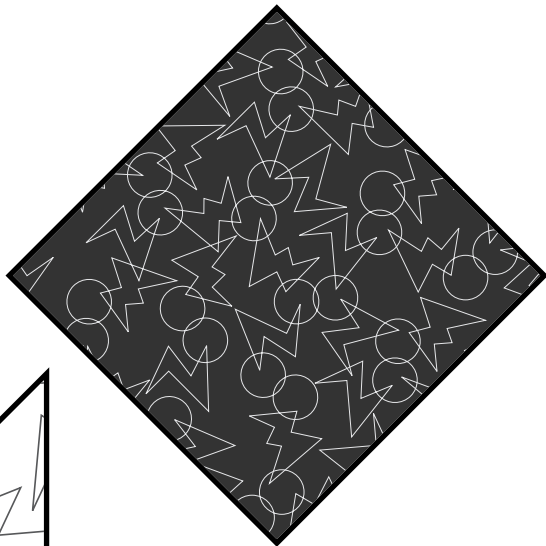
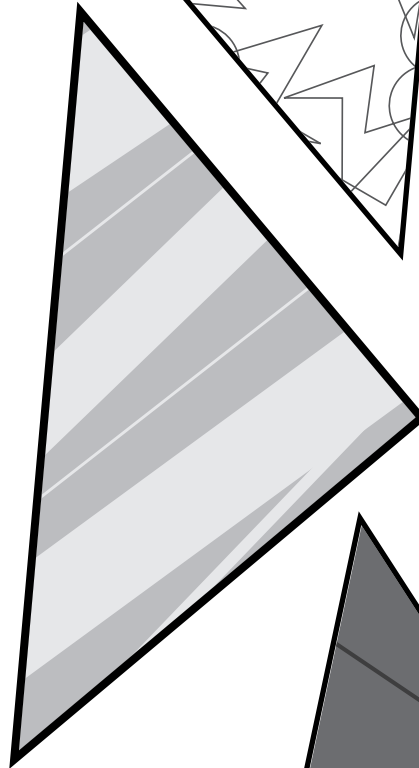
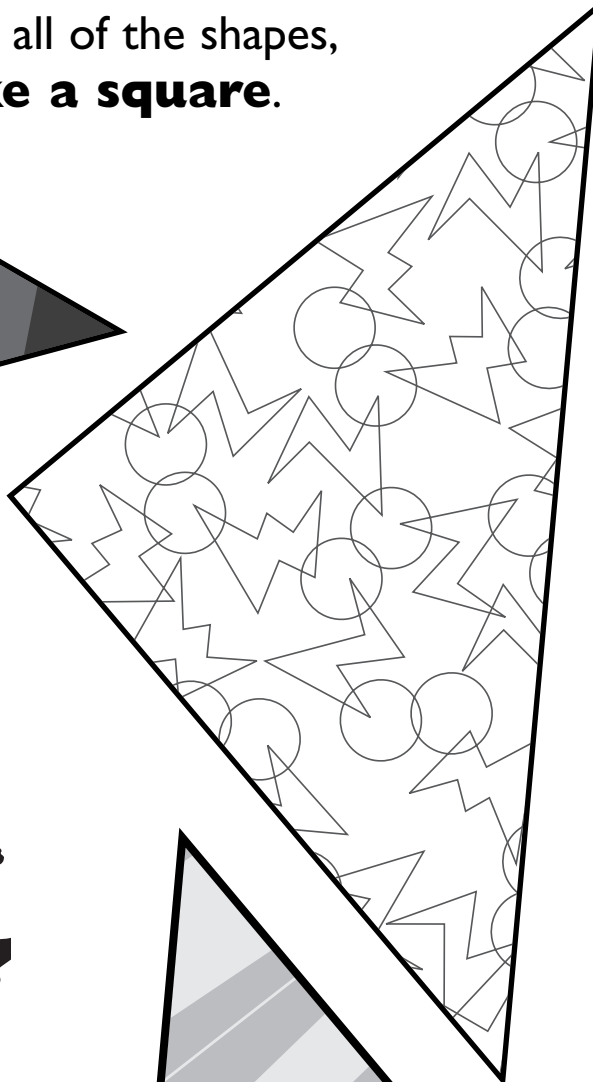
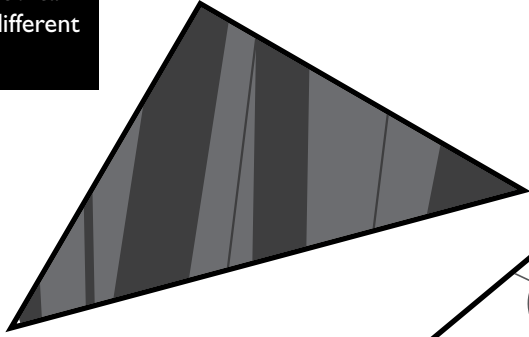
## What You Need

- scissors
- this activity sheet

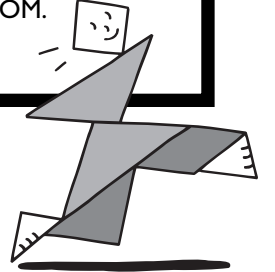
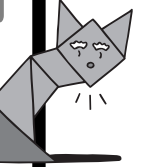
**1 Cut out** the seven shapes outlined on this sheet.

**2 Using all of the shapes, make a square.**

A **tangram** is a Chinese puzzle that's made of seven shapes. You can arrange the shapes to make different patterns and pictures.

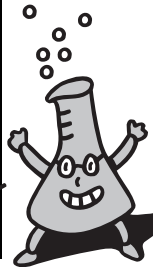


Now it's time for you to **experiment**. Try using the shapes to make the **fox** or the **running boy** shown below. You can have a race with your friends to see who can make the pictures first. Or, **invent your own** picture, trace the outside, and challenge your friends to arrange the shapes to make it. Then send your favorite pictures and solutions to ZOOM.



## Science Scoop

Look around you—**shapes** are everywhere! You can find shapes in the clouds above you, on the bottom of your sneakers, and in a zebra's stripes. By putting different shapes together or by taking them apart, you can make **patterns**. Scientists and mathematicians study shapes and patterns to **explain** how the world works or to **solve problems**. When you arranged the shapes to make a square, you used patterns to help solve a problem.



Use the two large triangles to make one big triangle. Then use the rest of the shapes to make a second triangle. Put them together and you've got a square!

HINT



ZOOM is produced by WGBH Boston. Funding for ZOOM is provided by the National Science Foundation, the Corporation for Public Broadcasting, the Arthur Vining Davis Foundations, and public television viewers. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

TM / © 2002 WGBH Educational Foundation



[pbskids.org/zoom](http://pbskids.org/zoom)

KIDS