



## THE GREEDY TRIANGLE BY MARILYN BURNS

### ACTIVITIES FOR STUDENTS

You can re-watch the video of this book being read aloud at Santa Fe Public Library YouTube channel, the City Summer Program Website (<https://summersantafe.weebly.com>) and the MathAmigos website (<https://mathamigos.org/>).

If you have any questions about the activities (but not about the materials), please contact Michele Reich at [library@santafenm.gov](mailto:library@santafenm.gov).

#### I. Materials

Geoboards

Story Template

Paper for writing

Three sheets of cardboard, two to make four "Shape Bingo" cards and one to make your puzzle

Yellow/red counters for Bingo Game

Scissors

Notecards

Pencils

Red, blue, green, yellow, purple, and pink colored pencils or markers

#### II. Activities to Do at Home

##### A. Making Geometric Shapes

1. If you are sitting, please stand up and put your hands on your hips. What shape did you make with your right hand? Using your other hand, trace the shape that you made. Let's try a few more.
  - a. Sit on the floor with your legs together in front of you. Draw your right leg in towards your body, and then draw in your left foot, putting the soles of your feet so they are together. What shape did you make with your legs?
  - b. Lie down on your back with your knees bent and your feet on the floor. Bring your bent legs towards your chest and hold on to your knees with your hands. Lift your head to meet your knees. What shape is your body making?
2. Now it is Your Turn. Can you make a different geometric shape? Do them and then share what shapes you created.

##### B. My Favorite Geometric Shape

1. If you could be any shape, what shape would it be? Let's write a story about the shape you picked. I would be a \_\_\_\_\_ because \_\_\_\_\_.
2. **Title:** My Story as a \_\_\_\_\_.
3. To get things started, describe how you would look and be specific so that a person reading your story could draw



- a picture of you.
4. Pretend you are that shape taking a trip or hike (for example) to explore the Santa Fe National Forest, outer space, **or** a place of your choice. You decide where your geometric shape is going. A few questions: Does your shape help you travel better—turn corners, etc.?
  5. What does your shape encounter? What would it see? What adventures does your shape have? What does your shape meet along the way—animals, plants, people, you decide. Be sure to have the students describe at least two encounters.

**C. Let's play, Who am I?**

1. I have three sides that are connected that form a point. Who am I?
2. I have no angles, no sides, and no points. Who am I?
3. I have four equal sides and four equal angles. Who am I?
4. I have four sides. Two are the same size and the other two are also the same size, but larger than the first two sides. All of my angles are 90 degrees. Who am I?

**D. Shape Bingo with members of your family.**



1. Students make a Bingo card on a sheet of paper for each player and one for the Caller.
2. Give each player yellow/red counters
3. Draw a big square on each card and divide the square into 15 smaller squares by drawing four lines equally spaced across the square, and four lines equally spaced down the square. See the example to the left.
4. In each square, draw triangle, square, rectangle, diamond, circle, pentagon, or octagon.
5. Color each shape red, blue, green, yellow, purple, or pink.
6. The Caller will call a shape and a color (like “red square”). If a player has a red square on his/her card, the player will put a yellow/red counter on that shape. The first player to get five shapes in a row with yellow/red counters on them, shouts “Bingo.”
7. The Caller will check the card to make sure the player correctly placed each yellow/read counter on a shape that has been called before declaring the winner.

**E. Make a Geometric Puzzle**



1. Use a piece of cardboard to make the back of your puzzle.
2. Draw and then cut out triangles, squares, rectangles and pentagons to make the pieces that will fit in your puzzle.
3. Cut the colored pieces out, mix the pieces up, and then ask a family member to put together your puzzle.

**F. Play Charades**

1. Ask family members to play *charades* with you. Each player gets a note card and a pencil.
2. Players will take turns acting out a geometric term such as angle, side, shape, triangle, quadrilateral, pentagon, hexagon—the other players will write down what term is being acted out.
3. Explain to the other players what you wrote down and why. When the correct term has been identified, another player will act out another geometric term.

### III. Extending the Topic to Other Geometric Terms

#### A. Yoga Math

1. Ask a family member to be your partner. Follow the shapes being made in the pictures below. The students in these pictures become parallel, perpendicular, and intersecting lines.
2. You and your partner pretend to be parallel, perpendicular, and intersecting lines.



3. Now let's add angles and then move to triangles. It is interesting to note that students in the picture below looked for a person with the right-height to make isosceles, scalene, and equilateral triangles.



- B.** Now it is your turn to create another activity illustrating geometric terms, keeping in mind how many people you have to participate.