Task: Making a Donut

Demonstrate for students:

- Take some graph paper, and roll it one way so that the lines match up.

- Now let it out again and roll it the other way so that the lines match up.

Note: In each case there is an obvious correspondence of points inside each square, vertically or horizontally.

Now suppose you could stretch it in just the right way to preserve these correspondences and do both identifications at the same time!

Challenge: What shape would you have made?

Answer: a torus or donut.