Moebius Bands

Make a Moebius band. Take a strip of paper and twist it once and tape the ends together.

Things to do with your Moebius band:

1. Draw a line down the center of the Moebius band.

2. Cut your Moebius band down the center.
3. Draw a line down the center again.

4. Cut along your line once again.

OR

Write a story on your Moebius band that's inspired by its shape.
Klein Bottles

A Klein bottle is a sort of 3 dimensional version of a Moebius band. It's a bottle with no inside or outside. The bottle doesn't really cut through itself. The "twist" is supposed to occur in a fourth dimension, but we can't visualize or make a model of that! The best we can do is to make a model with the bottle intersecting itself.
Three jolly sailors from Swindon-on-Tyne
Went to sea in a bottle by Klein
Since the sea was entirely inside the hull,
The scenery seen was exceedingly dull.
from *The Space Child's Mother Goose*
by Frederick Windsor.