

Nessie's Magic Illusion

by Lois June Wickstrom / Imagenie

- 1) Download and Print out either the color pictures of Caitrin and Quinn, or the black and white set. If you print out the black and white set, you can color them in yourself, or you can print them on different colors of paper.
- 2) Cut out the arcs. Be sure to keep the black borders of the arcs with the figures of Caitrin and Quinn. They help the illusion.
- 3) Practice holding the arcs on top of each other so they look the same size.
- 4) Practice holding the arcs beside each other. Notice how the one on the right always looks bigger. Make Caitrin and Quinn trade places. Watch how they appear to shrink and grow. You can practice in front of a mirror in order to get used to keeping the pictures facing your audience.
- 5) Either make up your own story or learn the story here.
Whenever Nessie's twins, Caitrin and Quinn stood next to each other they always checked to see which one was taller. (Place Quinn to the right of Caitrin). When Quinn was taller, he sang out "I'm taller than you-oo. Nanny Nanny Noo-Noo." Caitrin did not like that one bit. (Put Quinn down on the table) One day Caitrin became so angry, she went to Merlin the wizard, and asked him to show her how to be taller than Quinn. Merlin stretched her THIS way (pull on one diagonal), and he stretched her THAT way (pull on the other diagonal), and he stretched her the OTHER way (pull vertically). And he gave her an Invisible Magic Wand (tm). Then he taught her to say the Magic Words: "Tough Toenails With Tartar Sauce." The next time Caitrin stood next to her brother Quinn, (pick Quinn up from the table), she stepped behind him, and pulled out her Invisible Magic Wand (tm). (Put Caitrin behind Quinn, away from your audience) She said the magic words, "Tough Toenails with Tartar Sauce" and she stepped in front of her brother. (Place Caitrin to the right of Quinn.) And she was taller than Quinn. But the real magic is (place Caitrin directly in front of Quinn, then switch as you talk so Quinn is in front of Caitrin, and reverse again) they are both exactly the same size.
- 6) Have fun amazing your audience.

How does it work?

Our eyes tend to move our vision in straight lines. Short arcs like Caitrin and Quinn appear to be nearly straight and easily fool the eye. You can experiment with longer arcs and arcs that are closer to half of a circle to discover how many degrees of an arc (a circle has 360 degrees) will allow this illusion to work. In addition, our eyes tend to compare lines that are next to each other. When the short side of one arc is placed next to the long side of the other arc, our eyes see the entire arc as being the same size as the side being compared. The magic of Nessie's twins, Caitrin and Quinn, is the magic of optical illusion. The story of Caitrin and Quinn is based on the story of Mr. Tall and Mr. Small by Leslie Melville. "Tough Toenails with Tartar Sauce" is from James Bonner who was my neighbor and who was not allowed to swear.

<http://www.NessiesGrotto.com>

<http://www.ImagenieScienceAndMagic.com>

<http://www.InvisibleMagicWand.com>