The Spinning Bowl

Scientists demonstrate centrifugal force in huge laboratories.
You can do it in your kitchen sink.

**What to do:** Fill the large mixing bowl with about 4 inches (10 cm) of water. If you have a bowl that's about 12 inches (30 cm) across, it will be perfect for this experiment.

Float the dessert bowl inside the large bowl or pot.
Pour enough water into the-floating dessert bowl to fill it 1/4" (1 cm) deep.

Now spin the floating bowl as rapidly as possible using the wooden spoon. Just stick the spoon into the bowl as shown here and begin turning it. If you don't have a wooden spoon, stick your index finger into the bowl to start it spinning. Since the bowl is floating, there is very little friction- to slow it down and it will spin easily. Use a little wrist motion and the dessert bowl will pick up speed.

Try to keep it centered in the larger bowl. If the bowls touch, the spinning one will slow down.

What happens: Watch the water inside the floating bowl as you spin it faster and faster. The water will rise along its sides until the bottom of the spinning bowl is completely dry.

Let it slow down and the water will flow down from the sides of the bowl and cover the bottom again.

Why: Centrifugal force works on liquids just as it does on solid things. The faster you spin an object, the more it wants to escape by flying to the outer edge of the circle.

**YOU NEED**

- large mixing bowl or pot
- water
- dessert bowl
- wooden spoon

365 Simple Science Experiments
Churchill, Loeschnig, Mandell, 1997