The Mysterious Balancing Dinner Fork

Can you balance a table fork, a potato, and a pencil so only the pencil’s tip touches the table?

**What to do:** Press the pencil through the center of the potato or apple. (If anyone objects to your sticking things into the family's vegetables, a lump of soft modeling clay will do just as well.) Be careful doing this: Place the potato on a thick pad of newspapers. Don't hold the potato in the palm of your hand! If you do, you may run the pencil into your hand.

Slowly and firmly push the pencil point into potato. When the point pokes through, pick the potato up and hold it by its sides. Carefully push the pencil on through until about 1 1/2 inches (4cm) stick out. When you've gotten the pencil through the potato, press the tines of the dinner fork into one side of the potato so the fork is at about the angle shown here.

Rest the pointed end of the pencil on the edge of a table as shown below.

**What happens:** If you're having a lucky day, the whole thing will balance right away. If it doesn't, try moving the pencil tip farther onto the table or nearer the edge. You can also slide the potato backward or forward a bit along the pencil. By now this strange combination has probably balanced. If it hasn’t, you can begin to feel which direction it is going to move as you steady it with your hands.

Don't give up if it doesn't balance the first few times. Keep adjusting it. If necessary, pull the fork out and replace it at a different angle.

When the combination does balance, it looks as if you have found a way to defy the laws of gravity. With a little practice, you can adjust this so the pencil actually slopes downhill and only the point touches the table.

**Why:** You must have as much weight on one side of the center of gravity as on the other.

YOU NEED

• long wooden pencil
• one very small potato or apple
• dinner fork
• newspaper