



HOME DEMO NO. 17

Marble Madness

Try this and prove to yourself that, "Every action has an equal but opposite reaction." It will also give you the opportunity to lose your marbles, so try to keep track of them.

What you need:

1. Ruler with a center groove
2. Seven marbles, each the same size

What you do:

1. Tape the ruler to a level table or countertop.
2. Place five marbles in a row in the center groove of the ruler. Place them together, touching each other.
3. Roll a sixth marble down the groove into the other marbles.
4. Repeat the experiment, but this time roll two marbles into the row of five.

What's happening?

A moving marble has momentum. When it runs into the motionless marbles, its momentum gets transferred from one marble to the next. With two moving marbles, there's twice as much momentum to transfer. Try to transfer the momentum with three marbles.