



## Magic Marble

### Materials:

- a large glass jar
- a marble

### Directions:

- 1) Put your marble on a flat surface.
- 2) Do you think the marble can lift off the surface without you touching it?
- 3) Place the jar upside down over the marble so it is touching the inside curve of the jar.
- 4) Hold onto the bottom of the jar and begin to rotate the jar fast.
- 5) Make sure you keep the mouth of the jar on the flat surface.
- 6) Why do you think the marble climbed up the jar and kept moving as long as the jar was rotating?

### Inquiring Minds Want to Know

When your marble begins to spin, force goes into motion. Newton's first law of motion says that an object at rest remains at rest and a object in motion stays in motion unless acted upon by an outside force.