Moving Marbles

Procedure

1. Observe  Place one marble against the inside of a bowl. Push the marble so that it spins around the inside of the bowl. Observe the marble’s motion as it moves inside the bowl.

2. Communicate  On the lines below, describe the motion of the marble. Describe its speed and its direction.

3. Observe  Set two marbles next to each other on the floor. Gently push one of the marbles straight ahead. Then push the second marble straight ahead, but with more force. On the lines below, describe how far each marble moved.

4. Experiment  Set both marbles on the floor, about 10 cm apart. Gently roll the second marble so that it strikes the first marble. On the lines below, describe the motions of the two marbles.
Conclusion

Write the answers to the questions below.

1. Analyze Data In step 1, how did the marble move inside the bowl?

2. Analyze Data In step 4, how did the first marble behave when the second marble struck it?

3. Communicate On a separate sheet of paper, draw diagrams to show the motions of the marbles in steps 1, 3, and 4.

Investigate More!

Be an Inventor Invent a device that uses marbles in a fun way. Your device should use different types of motion. On a separate sheet of paper, draw a sketch, and use arrows to show how the marbles move.