

FUN WITH MARBLES

SCIENCE WEEK

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What do you think will happen if you roll a marble along a flat surface so that it hits a second stationary marble? Let's investigate.

WHAT YOU NEED

- 6 marbles
- 2 rulers
- Sellotape
- Sheet of paper

WHAT YOU DO

1. Place two rulers on a sheet of paper about 1 cm apart.
2. Tape the two rulers at both ends (to keep them in this position)?
3. Put two marbles in the middle of the rulers about 6 cm apart.
4. Gently roll the first marbles into the second marble.



WHAT HAPPENS?

When the rolling marble collides with the still marble, it stops, and the still marble now rolls.

WHY?

The energy of motion from the rolling marble is transferred to the stationary marble. It stops the first marble and sets the second one in motion.

ACTIVITY 2

Now put two marbles between the rulers so they touch and a third marble about 4 cm away.

What do you think will happen if you gently roll the single marble into the other two? Try it.

WHAT HAPPENS?

The rolling marble stops, the middle one stays still and the third marble rolls.

WHY?

The energy of motion went through the second marble into the third causing it to move. On occasions snooker players use this scientific fact to play a ball that's hidden behind another ball. Experiment by rolling different amount of marbles.

NOTE

Things like to stay still if they are not moving or keep moving if they are already moving. This is called inertia. For more activities on motion see www.primaryscience.ie.

