# Speed of a bullet from an air rifle

## Task

Determine the output speed of an air rifle bullet using the conservation of momentum.

## Equipment

* Air rifle
* Time measure devise with photocells
* Low friction track
* Weight scale

## Background

Attach a woodblock on the wagon of the low friction track and aim at the block. Though the wagon is standing still the momentum of the bullet is the only momentum in the beginning. Then the bullet hits the woodblock and the wagon starts to move. The speed and momentum of the wagon can easily be determined.

