6 SWING PHYSICS: THE JUMP THAT WON'T STOP!

Have you ever jumped off a swing and felt like you couldn't stop moving forward? That's inertia in action! In this experiment, you'll test whether you can land perfectly still—or if your body wants to keep moving. Get ready to swing, jump, and discover a force that's always at play!

SAFETY FIRST!

- Only do this activity with adult supervision and permission.
- Make sure there's no one in front of you before jumping.
- Land with bent knees to keep balance and avoid falling.

SUPPLIES

- Swingset

INSTRUCTIONS

1. Start swinging by using your legs to get a steady back-and-forth motion.
2. Observe your movement. Notice how you keep moving unless you slow yourself down.
3. When ready, carefully let go at the highest point of your forward swing and jump off.
4. Try to stop immediately after hitting the ground. Can you land and stay perfectly still? Or do you fall or run forward?
5. Have a contest with your friends or siblings: who can stay still after hitting the ground the best?

QUESTIONS

1. Could you land without moving forward? Why or why not? What does this tell you about inertia?
2. How would this experiment change if you jumped from a faster or slower swing?