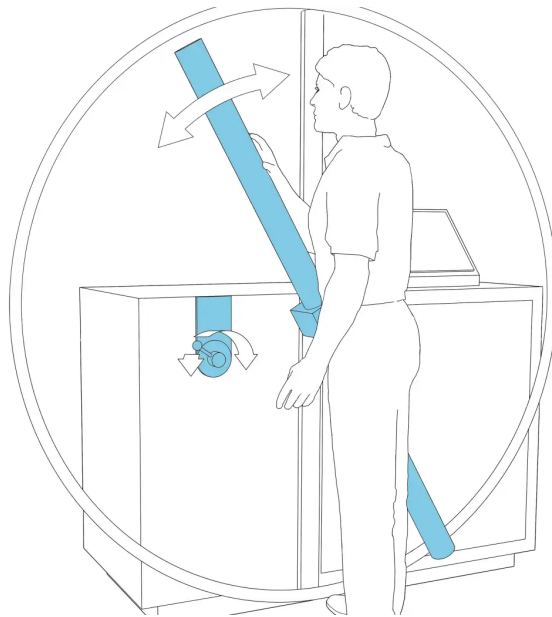


# Falling feather

Which object falls faster in a vacuum?



Turn the valve to "air" to let air into the plastic cylinder.

Turn the cylinder right over, and watch the dice and the feather fall.

Which one reaches the bottom first?

Turn the valve to "vacuum" and wait for about 15 seconds until the needle on the pressure gauge stops moving.

**Which object reaches the bottom first this time?**

In a vacuum all objects fall equally fast.

With air in the cylinder, both objects must overcome air resistance. The feather will be slowed more than the dice, because in relation to its small weight it has a large surface area. In a vacuum there is no air resistance. There is only gravity, which pulls everything down equally fast.