The Drop Race

KIDS HANDS-ON | RUN AT 11:50 | 15 MIN

The point

A heavy ball and a light ball, same size, same height — and they land **at the same instant**. Gravity pulls all matter alike. Galileo argued this; today the floor settles it.

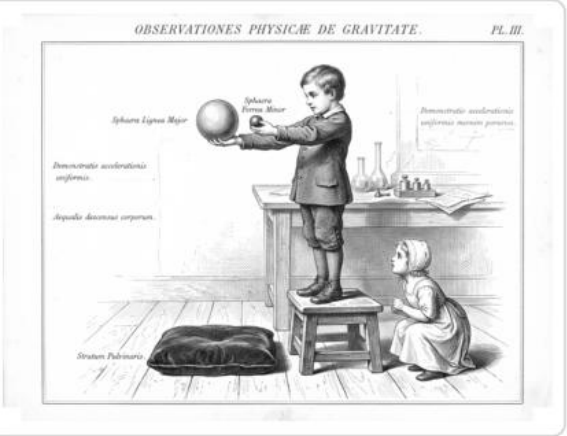
Materials

- Two same-size balls, very different weights (golf ball + hollow plastic)
- A chair or step for height · bare floor landing zone

Steps

1. **PREDICT first** (worksheet): heavy first / same time.
2. One child holds both balls at exactly the same height — knuckles level, a helper checks.
3. A countdown, and release together — not a throw, a release.
4. EARS as well as eyes: one thud or two?
5. Repeat until the release is clean and the single thud is undeniable. Rotate droppers.
6. Circle what really happened. Why same-size balls? (So the air's push-back — C-6's story — stays out of gravity's experiment.)

> *Say: "Four hundred years ago a man named Galileo said heavy and light fall together, and people laughed. You just ran his experiment — and heard one thud."*



TEACHER PREP

Choose compact same-size balls and test the tie yourself; a hollow ball that's too light drags on the air and muddies it.

What to watch for

- Level knuckles at release — the helper's whole job
- Listening for one thud convinces better than watching

EXPECTED RESULT

One thud, every clean release. Heavy and light land together — gravity pulls all matter the same, and a five-year-old can prove it.