

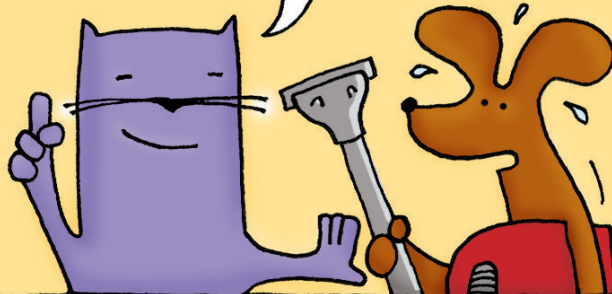
# DO ~~IT~~ TRY THIS AT HOME

Issue #124

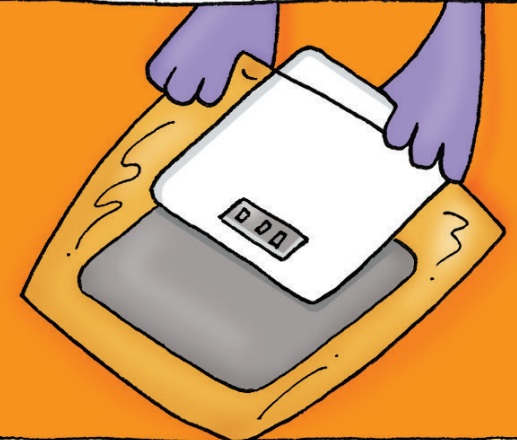
Featuring: **Marvin and Milo**

- What you need:**
- A vacuum cleaner
  - Sticky tape
  - A large, strong, clear plastic bag
  - Bathroom scales
  - A board about the scales' size

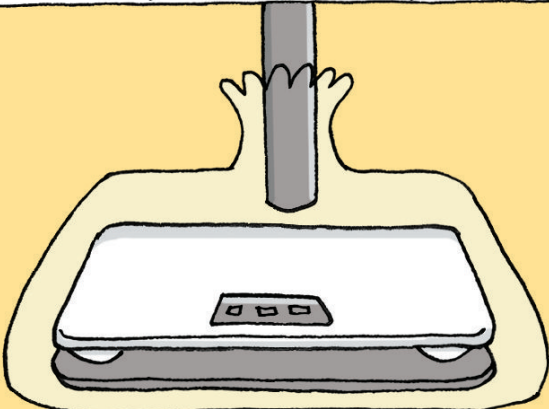
Stop the housework Milo! If you think that vacuum cleaner is heavy, let me show you how weighty the atmosphere is.



Place the board under the scales, put them together into the bag and wrap the plastic round them, fastening with sticky tape.

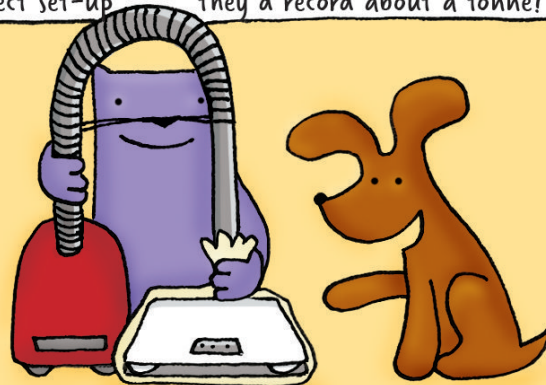


Stand the bag flat on the floor, put the vacuum pipe into the bag and hold the plastic tight round it.



Switch the machine on.

Once the air has been sucked from the bag, the scales should read about 150kg or more\*; with a perfect set-up they'd record about a tonne!



(\*You may need to try different scales or reset them for this to work.)

Normally, the air above and below empty scales pushes equally in all directions, so the forces cancel out and they read zero. With a nearly airless bag, the weight of the atmosphere pushes down on the scales but little force pushes up.



Vic Le Billon