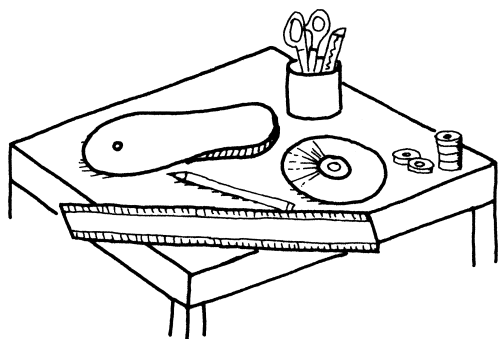
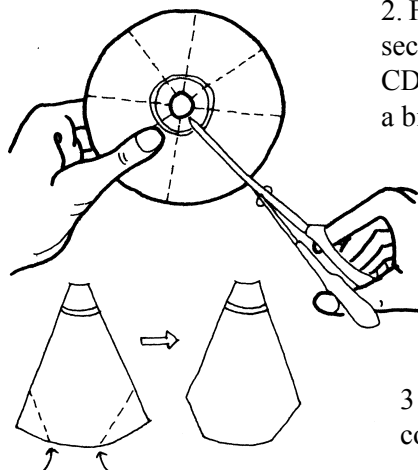


## IT LEVITATES, IT SPINS, IT WRITES!

This is simply a terrific toy. You can while away hours playing with it. It also gives you a tremendous feel of what magnetic levitation is all about. It costs less than ten rupees.

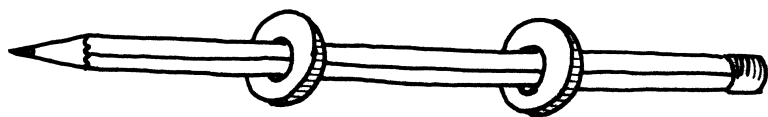


1. You need an old rubber slipper, discarded CD, 6 ring magnets (17.5-mm OD, 7.5-mm ID, 3-mm thick - they cost 1 rupee each), one pencil and few simple hand tools.

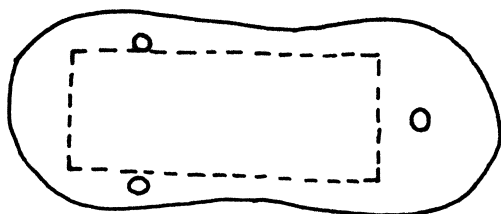


2. First mark out 8 equal sectors in the discarded CD. Cut one sector using a big scissors.

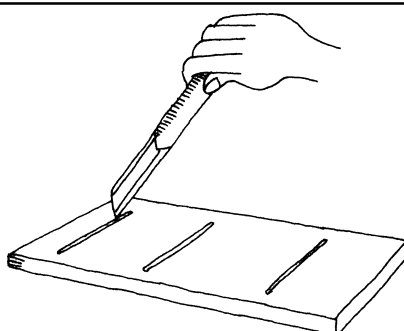
3. Cut the lower corners at an angle.



4. Take two ring magnets and press fit them in a pencil. They are just right to fit into a pencil. You might have to scrape the pencil a bit. The polarities of the magnets do not matter.

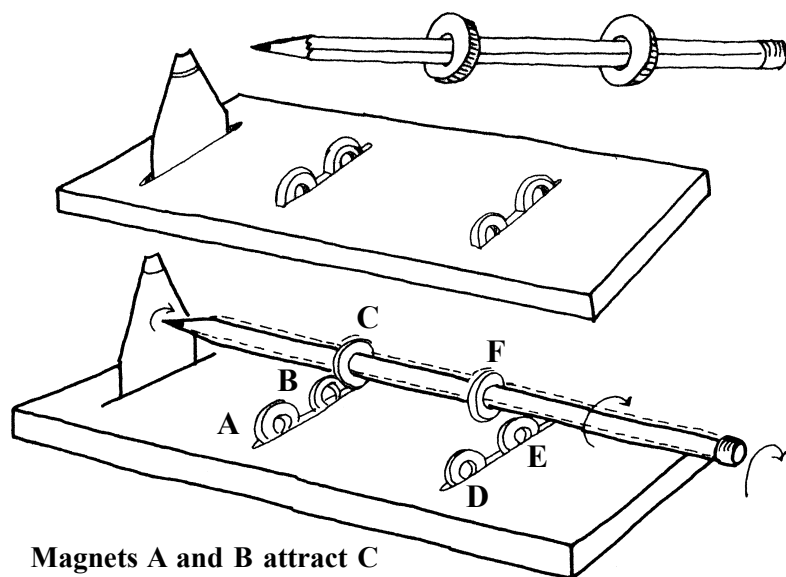


5. Cut a rectangle 15-cm x 7.5-cm from an old rubber slipper.



6. From one end mark out lines at 2-cm, 6.5-cm and 12.5-cm.

Make 5-cm wide cuts on these lines.



**Magnets A and B attract C**  
**Magnets D and E repel F**

7. Now insert the CD piece. Place 2 ring magnets in the rubber slit next to the CD. These magnets must have poles which attract the pencil magnet close to the writing end. Insert two more ring magnets in the other slits. These magnets must repel the pencil magnet (away from the writing end)

8. If you now place the pencil it will levitate in air with its tip resting on the CD. Now twirl the rear end of the pencil and it will keep spinning for a long time. You may have to adjust the positions of the pencil magnets a bit to get the pencil to levitate.

*(Magnets can be ordered from Hindustan Magnet House, Pune Tel (020) 2551-1623, 2551-1021)*

Pix: Shibika Chowdhary