PEN PROPELLER

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Toys from Trash

www.arvindguptatoys.com/toys.html

☑ Step-by-Step Photo Guide
☑ Detailed Worksheet

See 1 minute video at:
http://www.youtube.com/watch?v=F2IKo40pufk
Punch holes in rubber (triangle sides 3.5-cm) Insert 15-cm long sticks

Cardsheet Disc (7-cm OD, 3-cm ID) Stick Magnets ALL Magnets Repel

Push Magnet

Stick Magnets on card disc so that they repel each other

Assemble as shown

Sticks 15-cm long

Rubber Base

Coin
TWIRL PEN

Place Pen Tip on Coin. Adjust stick length to balance pen

The pen spins on its TIP for a very long time

Now fix a PROPELLOR to the pen
Keep below FAN The Propeller will Spin Forever

TOP VIEW OF PROPELLOR
**Standing Spinning Pencil**

**You Need**

- 4 pencils
- Rubber Base
- Coin with dent
- Thick card
- Ring magnets
- Glue
- Bottle top fan

1. **Step 1:** Stand 3 pencils on a rubber base. Stick thick card on top for support. Fix three ring magnets with same poles up. Fix another magnet in a sharp pencil.

2. **Step 2:** Stick a coin with a dent on the rubber. Make a fan from a bottle top and glue it to the middle pencil.

3. **Step 3:** Adjust the central magnet to make the pencil stand on its point. Place under a ceiling fan to spin the pencil continuously.

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