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Toys from Trash
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☑️ Step-by-Step Photo Guide

☑️ Detailed Worksheet

View One Minute Video at:
http://www.youtube.com/watch?v=sS2BdyCvWzE

Magnetic Torch
Materials

- Rubber pieces
- 35 Guage enameled Copper wire
- Film box
- LED
- Glass test tube (150mm x 15 mm)
- Strong Magnet (12mm x 10mm)
- Cotton
Place strong magnet and cotton bulb in the test tube as shown

Make rubber rings

Fix rubber rings as shown and wind copper wire (500 turns)
Remove enamel from ends of copper wire and connect to LED.
Shake test tube vigourously lengthwise to see LED glow
Vigorous shaking makes LED glow brightly.
magnetic field will produce current in the coil and light up the LED.

Now hold the syringe barrel and shake it. The magnets will reciprocate freely. The changing

Find 500 turns of thin insulated motor

Wind 500 turns of thin insulated motor

Insulation from the ends and attach them to

Insulation from the ends and attach them to

a LED.

Wind 500 turns of thin insulated motor

Wound 500 turns of thin insulated motor

a LED.

3. LED.

3. LED.

Wind 500 turns of thin insulated motor

Wind 500 turns of thin insulated motor

2. Strong magnets and insert the

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rubber piston as a stopper:

rubber piston as a stopper:

Place cotton in a syringe barrel. Remove

Place cotton in a syringe barrel. Remove

rubber piston from the plunger.

rubber piston from the plunger.

 YOU NEED

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REWINDING WIRE

REWINDING WIRE

INSULATED COPPER

INSULATED COPPER

COTTON BALL

COTTON BALL

STRONG MAGNETS

STRONG MAGNETS

LED

LED

SYRINGE TORCH

SYRINGE TORCH