Building a PVC Pipe Speaker
You need...

- PVC Pipe
- Square of plastic bag
- Tape
- Scissors
- Two magnets
- 6-m length of wire
Add the Diaphragm

The plastic bag becomes the diaphragm of your speaker. Pull it taut over the mouth of the pipe and tape in place. It should be TAUT. It should feel like you’ve made yourself a little drum. The following experiment does not work well if the plastic is not quite taut.

The tape on the speaker shown does not touch the pipe. It is simply wrapped very tightly around the bag. You can tape the bag any way that you’d like as long as the bag is stretched taut over the opening.
Wrap Some Wire

Count the number of turns!

Remove the 6-m length of wire from the spool and wrap it around the mouth of the pipe. You can use some more tape to fix the wire in place, or you can twist the two ends of the wire to keep everything snug. Do not completely cover the wire in tape because you will might need to access it in a little bit.

The speaker will work best if the coil is close to the end of the pipe.
About the Wire

Notice that the last few centimeters of each end of the wire looks like copper. The rest of the wire looks red. Most of the wire is covered with red insulation. The insulation has been stripped off of the two ends of the wire, leaving the copper wire exposed.

If you twist the un-insulated ends together, you might be unhappy with the performance of the speaker.
Add the Magnets

The End

1. Turn the PVC pipe over.

2. Drop in a magnet.

3. Stick the other magnet on the other side of the plastic such that the diaphragm is being squeezed between the two magnets. Done!