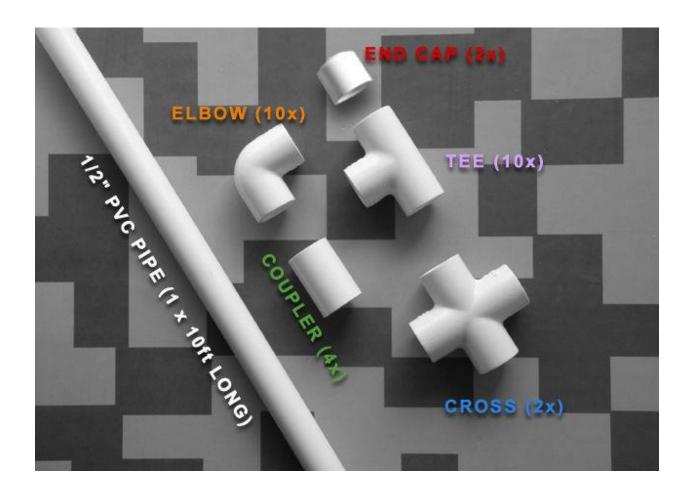
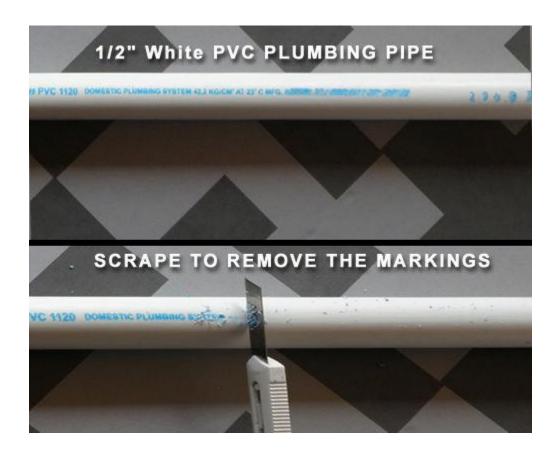


Tools

Materials:



1. Cleaning Markings on the Pipe:

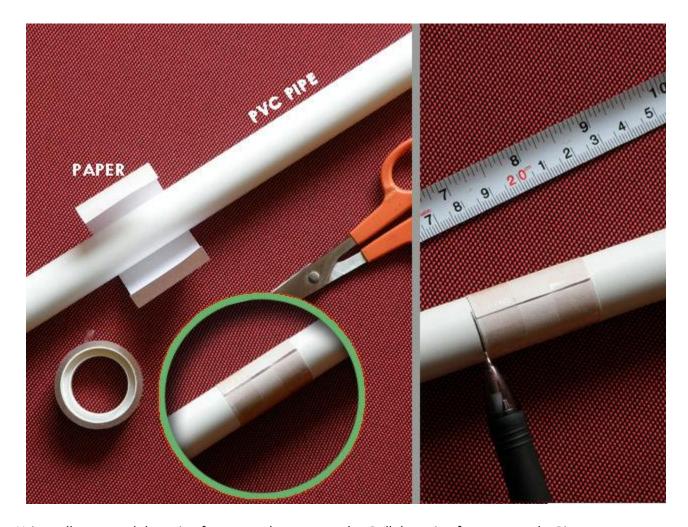


Safety First!

Work in a well ventilated and well lit area When cutting/scraping/sanding the pipe safer to use a mask & eye protection

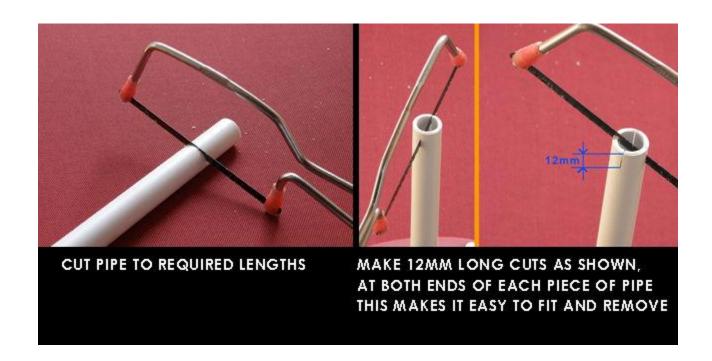
Gently **scrape** the markings using a knife/cutter or fine grade sandpaper. I prefer to scrape, I find it is the fastest method ... and the least messy (You could also use steel wool, scotch-brite and acetone to remove the markings)

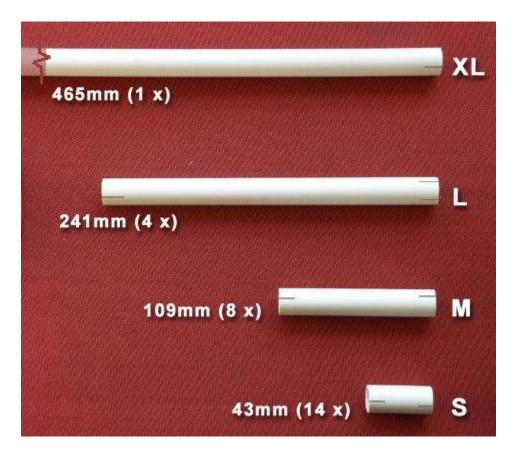
2. The Marking Jig:



Using cello tape and the strip of paper, make a paper tube. Roll the strip of paper over the Pipe - not too tight - just loose enough so that it easily slides over the pipe. This becomes your marking Jig. You can now slide the paper tube to the required position and draw a line (on the pipe) along the edge of the paper.

3. Cut The Pieces:





Mark 43mm from one end of the pipe. Use the Marking jig (the paper tube you just made) to draw a line all around the pipe. Cut using a Hack Saw (Or a PVC pipe cutting tool). The line drawn all around will help you to keep 'on line' and to make the cut nice and square. Use sandpaper (OR a file, OR a knife) to clean the rough edges.

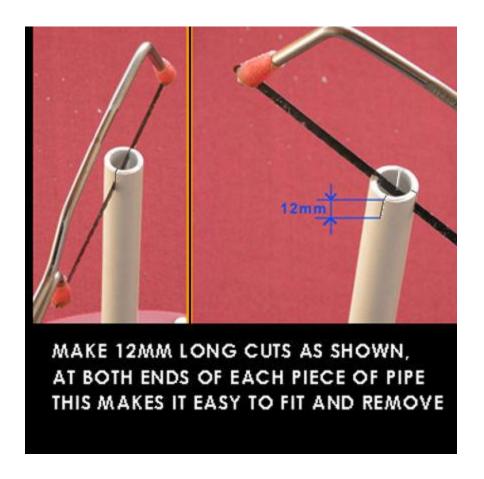
Continue marking and cutting pieces of pipes. Sizes and number of pieces are mentioned below:

```
43mm Long = 14 pieces (Let us call these 'S')
109mm Long = 8 pieces (Let us call these 'M')
241mm Long = 4 pieces (Let us call these 'L')
465mm Long = 1 piece (Let us call this 'XL')
Totally you'll have 14+8+4+1 = 27 pieces
```

After cutting all the pieces **you'll be left with about 100mm** length of the pipe. **Keep it safe** - It'll be used later in case you decide to make the 'wheel-assembly' (Step-10)

The lengths and number of pieces are calculated after trying/designing several assemblies. It is important that you stick to the lengths mentioned here. One length of 10ft Pipe will be fully consumed - **Nothing wasted!**

4. Ease of Assembling/Dismantling:



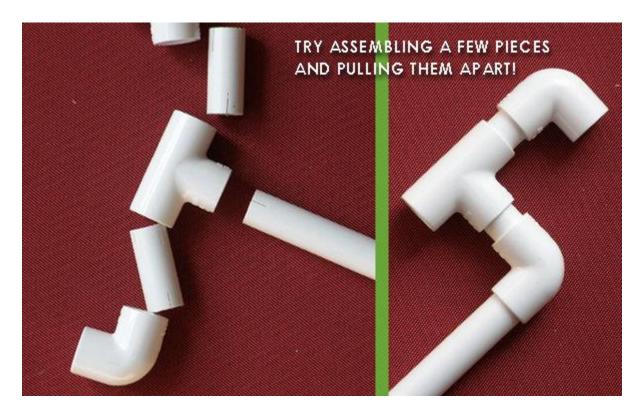
IMPORTANT:

Make cuts of about 12mm length at both ends of each of the 27pcs. This makes pushing the pipes into the fittings & removing them easy.

Without these cuts, if you push the pipe tightly into a fitting (even without glue), It'll really be difficult for kids to pull it out. So **these cuts are a MUST**.

Clean all cuts using fine grade sandpaper or a file.

5. Clean and GO!

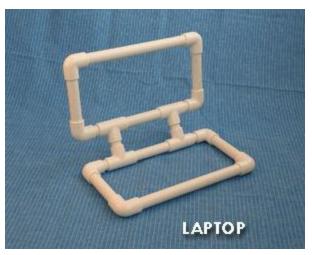


Clean and wash:

Wash all the pieces thoroughly (to remove any dust, dirt, particles etc). I soaked the pieces in mild detergent solution for about 5mins and scrubbed them with a soft old toothbrush, washed them clean, and dried using a paper towel.

Start Off:

Now that you have 27 pieces of pipes and 28 pieces of fittings Your 55 piece Kit is Ready to use.





6. Assemble the Wheels

