MAKING LOTS OF POOTERS FOR LESS THAN £1.50 EACH

Material for each pooter

One 250ml PET (Polyethylene terephthalate) plastic soft drinks bottle – ideally with completely clear sides, no marbling, no ridges or grooves. (cost:- 70p to £2 – but comes with free orange juice!). There are at least 3 screw threads used on the caps, try and get ones all of the same type so that the bottles and caps are interchangeable.

Two pieces of 9mm external diameter (6mm inside diameter) clear PVC plastic tubing 25cm long (sold by Aquarium suppliers, home winemaking or more cheaply via the web eg http://www.bearingboys.co.uk/?catid=1239&att1=8&att2=&att3 cost around £10 per 30m – makes 60 pooters.

Two 5cm lengths of 2 contrasting colours of PVC insulating tape (although red (danger) and green (safe) are the obvious ones, around 8% of boys and ½% of girls may be genetically red-green colour blind – so go for red and green/yellow (earth in electric cable insulation) striped tapes or the blue and brown of live & neutral electric cable insulation).

Very small elastic band or very short (2-3mm) length of 6mm lab-type rubber tubing.

2cm circle or square of very fine plain nylon curtain netting (about £1 for 1x1m square from local market).

Single sheet of loo roll (single and triple plies separated) for bugs to walk about on (bugs can get between the plies of 2 or 3-ply and disappear).

Tools needed to make pooters

9mm electric drill bit (the type with much narrower 'spike' at the business end) the sharp sides of the drill wrapped in two layers of PVC insulating tape to within 1cm of the sharp end to avoid cutting your hand.

Kettle of very warm (ca 45-50^{o}C) water.

Couple of pieces of kitchen roll soaked in white spirit or turpentine substitute.

Piece of flat scrap softwood maybe 20cm square.

Sharp scissors.

Procedure

(if making more than one, do each stage all together for greater speed & efficiency)

1. Cleaning bottles and removing label

Most bottles have self adhesive paper or plastic labels, though some have labels glued only at a very narrow vertical strip where the two ends of the labels join – these can easily be removed by slipping a knife under the label away from the glued bit and slitting the label. It can then be easily pulled off.

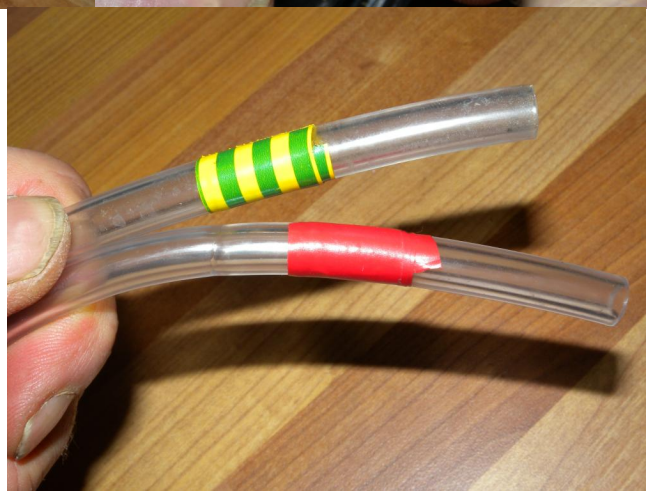
If the label is self adhesive then half fill the bottle with very warm water (not too hot – above around 55 ^{o}C the bottles will distort and shrink), avoiding wetting the label (they tear easily if wetted), and then replace the cap and swish the water around to thoroughly warm the walls. Wait a few moments and then insert a fingernail under a corner of the label and carefully prise it up – it should be possible to remove the label cleanly, though if any glue remains on the bottle, dry it with an old teacloth and then clean the glue off with one or two pieces of kitchen roll wetted with white spirit/turps subs, which, along with any remaining glue, can then be washed off in warm water with washing up liquid. Empty the water (into another bottle if you are making many pooters) and rinse/wash to remove any remaining fruit juice. Allow to dry.

2. Making the holes in the cap

Hold the plastic bottle cap onto the bit of scrap wood and then holding the wrapped drill bit in the other hand, pierce the cap from above with the central 'spike' of the bit about 12mm in from the edge of the cap. Then press and twirl the bit simultaneously so that the outer edge of the bit cuts a neat circle from the cap, hopefully leaving a neat hole (if the hole is ragged-edged or not quite circular, 'twizzle' the bit rapidly in the hole between forefinger and thumb which should neaten it up (be careful not to enlarge the hole while doing so.

Repeat at the other side of the cap to give two holes, spaced about 5mm apart.

3. Adding the tubing



Push each piece of tubing through a hole, so that it protrudes about 6cm into the bottle (most easily done with the cap back on the bottle). Place the circle/square of nylon netting over the 'inside the bottle' end of one of the tubes and secure in place with the circle of rubber tubing or elastic band (elastic bands will probably need to doubled or trebled to make them small enough to use), easing it along the tubing to stretch the netting tight and until only a couple of millimetres of netting remains not tensioned by the elastic. This is the tube to suck through.

Wrap the green/green&yellow striped/brown insulating tape a couple of times around the other end of the tape about 5 cm from the end and then do the same with the red/brown tape around the other tube.

You've now got a fully functioning pooter - pop in the sheet of single ply loo roll and you're ready for off.

Maintenance, sterilization and cleaning.
Before using, and between different people using them, dip the ‘safe’ or ‘sucking’ end into a strong sterilizing fluid (half a ‘Milton’ baby bottle sterilizing tablet in 300ml of water is effective) for a few seconds (don’t dip the other end, bugs will get stuck in the water left lining the end of the tube). Do this visibly, so that parents can see that it’s being done and explain what’s going on (“just in case the last person who used it had something nasty, to make sure you won’t catch it – don’t worry – it doesn’t taste of anything”).

After use and releasing the catch, check the bottles and tubing – some kids blow rather than suck,(how ever often you explain) and may fill the mouth tube (and sometimes the bottle) with spit. ‘Retire’ such pooters until they can be washed back home.

Always check that the netting is still on the sucking tube (or get the kids to check in the preamble) before letting them be used. Occasionally check the elastic bands holding the netting on – with time they go brittle and may snap, allowing the netting either to be sucked up the tube (and hence into the mouth) or allow bugs to pass straight through to tickle a pair of sensitive tonsils – this has never happened with circles of rubber tubing which have remained elastic for more than 10 years. Also check that the band isn’t being pushed off the netting if the tube is pulled.

Some insects may excrete or secrete defensive substances on the sides of the bottle or on the loo paper. With the exception of the secretions from very large ants (formic acid) and the larger ground and rove beetles (a smelly brown juice) (usually only from the bigger ones that will not in any case fit in the pooter), these are undetectable by the user, but may obscure the insides of the bottle with time. Wash the bottles occasionally along with the washing up.

Bottles eventually get scratched and become hazy and then opaque. Replace the bottle with another, trying to get a replacement with the same cap thread so that the everything else is reused without dismantling.

Enjoy!

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