MAKE AND TOKE YOUR OWN BONGS!

===> A guide for everyone on the art of making bongs, from the simple to the sublime.
===> Remember, there's more to marijuana than just smoking pot.

**Why Bongs? / The Bong Concept**

Making a bong is very simple, because the concept of a bong is simple. When you toke, you are bubbling the smoke through water before inhaling it. This text phile will take you through various aspects of bongs and bong-making. I hope you will find it valuable and I hope it inspires you to make your own bongs.

The reason for using a bong is mostly for health reasons, though people love using bongs for many more reasons. The active part of marijuana, THC, is *not* water-soluble, so you will not lose any of your high by hitting a bong instead of a joint or pipe. The water does filter out many of the impurities (the resinous tar), thus saving your lungs from inhaling crud. Very hot water will remove the most impurities, and very cold water will cool the smoke for a smoother hit.

(THC-delta-9 tetrahydrocannabinol.)

The anatomy of a conventional bong is *very* simple. It consists of a bowl (with a screen), a stem, a chamber, some liquid, and an opening for the mouth.

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         | |  <=="mouthpiece"
       / \
      /   \       
chamber===>  |
"carb"===>  0   <==bowl
water level ===>    // <==stem
```

The crude diagram above shows a generic bong. All you need for a simple bong is a plastic pop bottle (12-ounce or larger recommended), some kind of stem (a metal tube, plastic tubing, or whatever), and a bowl (use aluminium foil if you can't find anything else). I suggest investing in a tube of silicone--it's the best sealant for plastic, and satisfactory for metal-plastic seals.
After you have constructed the bong and let the sealant cure, don't forget to drill (knife) a 1/4" hole for the carb (short for "carburettor", I guess). Water fills the container and stem just up to the carb. The water level should really be at least an inch below the carb so that when the bong is tilted the water won't leak. The job of the carb is to regulate where the air will be supplied from. If covered, the air (smoke) will come from the burning weed; if uncovered, air will be pulled in through the carb to force out the standing smoke from the chamber.

Do a "water test" before you pack a bowl. Pull a lungful through the bong with the carb covered. If you get a biting, chemical flavour, then you have not let the silicone cure long enough--it's toxic to inhale until it's fully cured--then it's harmless. The water test will also let you determine how airtight your bong feels.

Smoking a conventional bong means that you have water in your bong, you have a packed bowl, and a lighter. Cover the carb with your thumb and light the bowl and pull air through the bong until you get a steady bubbling of smoke through the water. When your lungs start to hurt a little, let go of the carb and gently pull in the trapped smoke. If your lungs feel fine as you inhale, then save a little lung space for the trapped smoke--let go of the carb and pull it in!

Not all bongs work with this method, however. Gravity bongs work on a different concept, which will be explained later.

Bongs vs. Joints & Pipes

Not everyone uses bongs. New smokers may wonder why anyone bothers with bongs, and I know plenty of stoners who *prefer* joints to pipes or bongs.

Those who favour joints will wax romantic about the joys of rolling, of passing around a fatty, and of super-potent roaches. While I will not turn down a joint making its way around a room, I have never rolled one myself. I disdain joints mainly because of their wastefulness. Consider: While the joint is being passed around or stalled, it is still burning, losing precious smoke. If you grow your own buds you can afford to be carefree, but that is a luxury. Most stoners must pay astronomical street prices for what is just a WEED.

Bongs have a special advantage. A stoner can control the burning by using the flat side of a lighter to extinguish the bowl after taking a hit. The practice of extinguishing the bowl can save a lot of pot in the long run.

Even those who don't habitually extinguish the bowl will still save more buds, considering the size of a bowl compared with a joint. A bowl holds a smaller amount of bud, so the most you can waste is the quantity a bowl will hold. Stalling a joint, though, will use up a much larger portion, depending on the size of the joint.

Joints are *much* harsher on your lungs. While some joint-rollers will use pre-made filters, or a makeshift filter made from a rolled-up paper, nothing compares with the filtration effect of water. Ed Rosenthal of _High Times_ has noted that water not only cools the smoke, but actually removes harmful impurities as well. Bongs have this advantage over pipes, which, like joints, pass the unfiltered smoke right into your lungs.
As far as portability goes, bongs can be made in a variety of sizes. I made myself a portable bong out of a 12-ounce plastic water bottle. It works fine, though the filtration leaves something to be desired. Nevertheless, I prefer it over my corn-cob pipes, which I never use anymore.

**Considerations in Bong-Making**

When planning a bong, one should aim for specific goals. Should the bong be portable? Fancy? Colourful? Here's a partial list of characteristics which give a bong its individual personality:

- Air tightness/ease of drawing smoke
- Bowl size
- Choice of chamber/tube(s)
- Compactness/portability
- Decoration
- Filtration
- Hit size
- Transparency
- Tube diameter
- User accommodation
- Volume
- Etc.

**Air tightness**

I will not discuss every possible characteristic of a bong, but I will stress that no matter what kind of bong you make, you should strive for air tightness. When in doubt, just dab and smooth some silicone around the joints where materials meet and leave gaps. An airtight bong means that you will not be wasting lungpower. This quality becomes progressively important with more chambers added to the bong, because there are more possible gaps.

**Materials**

While there's a wide variety of containers and materials you can use in making a bong, make sure they will be safe. PVC IS OUT! DO NOT USE ANY TUBES MADE WITH POLYVINYL CHLORIDE BECAUSE THEY LEACH OUT CARCINOGENIC PARTICLES OVER TIME. When deciding whether to use a certain kind of plastic or not, the rule of thumb is to make sure it's safe for food. If it's meant to store food, it's okay. Otherwise, don't risk it. Plastic tubing is fine. Glass is optimal because it's inert.

My friend's bong, "The Monster", is made from a 1-litre, heavy-duty Erlenmeyer flask with a two-hole stopper (+ stem & bowl) and a length of rubber tubing. It's simple, it's airtight, and you can watch the smoke fill the chamber while your friend is taking a hit.

Metals are fine to use, too. STAY AWAY FROM COPPER BECAUSE IT LEACHES INTO THE SMOKE. Stems and bowls made from aluminium and brass are the best. Stay away from any metal that could leach into the water, and especially stay away from lead (duh).
Clay is great for bongs. The same friend who owns The Monster had a buddy of his make him a small clay bong. It's only about 6” high, with a round chamber, a stout neck and a fixed bowl. It was not glazed or fired, but it's airtight and very portable, not to mention cute as shit.

**More water = better filtration & harder pull**

Being the health-nut stoner that I am, I have decided that filtration is the most important characteristic for my bongs to have. I figure that I'll be smoking buds all my life, and since I have asthma I want to be as kind to my lungs as possible.

The best filtrating bong I've ever smoked is my most recent creation--the triple-chambered bong. Yes, it is smooth as shit--I blow out huge clouds without feeling any irritation on my lungs. Do it yourself: use three Mickey's Malt Liquor (wide-mouth) bottles and some 1/4” clear plastic tubing (hardware store). I strung my bottles together in series, meaning that the bowl on the first one is connected to a stem (3/8” plastic tubing) that plunges down to the bottom. Another hole in the cap lets a second tube draw the smoke out of the first chamber and channel it to the bottom of the second bottle. The same thing again--another tube draws smoke out of the second chamber and pulls it down to the bottom of the third chamber. A fourth tube is the sipping tube to inhale the smoke from the third chamber.

The trade off is that it is a little harder to pull the smoke through this bong than through a standard Graphix, especially if all the bottles are more than half-filled with water. I sealed all the joints with silicone, so it's surprisingly tight and easy to pull, given the length of the draw and the weight of the water. The bonus is that I usually put boiling-hot water in the first chamber, with iced water in the second and third chambers. Don't try this with plastic chambers!

If filtration is not that important to you, just make sure the smoke bubbles up through at least a half-inch of water.

**Liquids**

If you like to experiment with bong design like I do, you may try using different liquids in your bong. Here are some things I've found: Carbonated liquids (seltzer, pop) really scrub the smoke well, because of the agitation of the bubbles. Different pop/juice flavours really don't do anything to the flavour of the smoke. Beer and hard liquor add excellent flavour to the smoke, but they cost hit power, since THC is soluble in alcohol. Chloraseptic (throat spray) will numb your throat as you smoke, eliminating all smoke irritation on your throat--kind of scary and I wouldn't advise it. Mouthwash covers the smoky taste with a great mint flavour, but I don't know what hazards it holds--again, not recommended.

Hot water is excellent for scrubbing the smoke--use boiling water, if possible. The trade-off is that the heat of the steam can be more irritating that the heat of the smoke. At the right temperature the steam will soothe your throat by humidifying the smoke. Cold (ice) water is excellent for cooling the smoke and giving you great big bong hits that you thought impossible with your tender little lungs.
Aesthetics

My first phile was called "The Art of Making Bongs" for good reason. There is indeed an ART to it, and you should open up your creativity to your project. Impress yourself, and impress fellow stoners by using materials that please the eye as much as that killer skunkweed pleases your state of being. Sure you can make a quickie portable with a 12-ounce water bottle, but what about your home/party bong? Take the time to explore garage sales, flea markets, thrift stores, and basements to find some cool container that screams "BONG!" The rest is up to you.

I made a hookah (multi-user bong with sipping tubes) out of a brass "pitcher". I found it at a garage sale for $4. The hinge for the lid was damaged, but I didn't need the lid anyway, so I threw it out. I thrust a stem and two thin (3/16") flexible plastic tubes down the top opening and sealed it up with silicone. I plugged the spout with silicone, and *voila*-a romantic, two-person hookah that is interesting to look at.

A couple buddies of mine had a plastic pig's head that was supposed to be a toy bank. Guess what they did with it.... They stuck a stem into the pig's mouth and widened the coin slot to make an excellent bong that has a large chamber for smoke.

Gravity Bong

Gravity bongs work on an entirely different principle than most of the bongs you'll see in your travels. They are very easy to make, are hard to fuck up, and give great hits with decent filtration. The quickest way is to use a 1-litre plastic pop bottle, a 2-litre plastic pop bottle, and a bowl. Drink or dump the pop, then slice the neck off the 2-litre and slice the bottom black part off the 1-litre. The 1-litre serves as the "top" which fits inside the "bottom" part, the 2-litre. Use a knife to carve a hole into the bottle cap of the 1-litre, and screw in the bowl. (Make sure it's airtight.)
A gravity bong works by using a vacuum to pull in the smoke. One you've filled your 2-litre to the top edge with water, and inserted the 1-litre, THEN screw on the bowl and pack it. Light the bowl and SLOWLY pull the 1-litre up to create a vacuum that steadily pulls in the smoke. Make sure you don't pull the 1-litre all the way out of the water, because that will destroy the vacuum and you will lose your smoke. When you've pulled up all the way, unscrew the bottle cap and wrap your lips around the top. Let go (don't push)--the pressure of the smoke and gravity will pull the 1-litre down, pushing the smoke out and into your lungs.

I still don't know how it works, but there is some filtration effect with gravity bongs. Try using water with a lot of ice.

Notice that the 2-litre component can be any large body of water--a pot, a bathtub, a river, a lake....

**Clean your screen!**

***Quick tip: After finishing a bowl, dump the ashes, then purse your lips and blow a quick lungful through the bottom of the bowl to refresh the screen. You can hold the bowl up to the light to see if it's clean or not. Too many stoners will pack bowl after bowl without blowing out the screen--after a few bowls your hits will feel like trying to suck a golf ball through a garden hose.

**Scraping Your Bong**

After a lot of use your bowl and stem will get caked with resin (tar). Besides clogging up the bong's works like arteriosclerosis, the build-up of resin will be partially smoked every time you hit a bowl. The idea of bongs is to save your lungs from that tar crap, but if you are desperate for a high and you're out of bud, you can always smoke that resin after you scrape it out.

When scraping your bowl and stem, you should use a thin, narrow metal object. The awl attachment on a pocketknife works well. I've heard of stoners using an unbent coat hanger, although I prefer a jeweller's screwdriver.

I recommend throwing out the resin, but if you want to smoke it, it will give a powerful hit, similar to hash. The best thing to do is to save some leftover ash, then scrape your bowl. The flakes of resin that come off are very sticky and are hard to roll without smearing them all over your fingers. Resin smells very strongly, too, and won't come off your fingers for a few days. If you roll the resin with the ash, the ash acts as a binder and keeps the resin from sticking to your fingers excessively. After scraping the resin onto a smooth, flat surface, roll it with the ash into a ball. When done, stick it back into the bowl and smoke it.
**Lighters**

Lighters come in a variety of shapes and sizes. Ordinary cigarette lighters are adequate for smoking bud, but they're not the best. If ordinary lighters are used, it's best to make sure the flame is at least 1.5” tall. When lighting, the lighter is best held as vertically as possible, with the flame being sucked over the edge of the bowl onto the bud. This method avoids singed fingers.

If the flame doesn't get tall enough, here's a trick to really kick it up: The flame-height slide is really a tiny wrench that turns a tiny gear. Pull the metal guard so it's wider, then remove it. Now lift that slide up and out of the gear, then move it to the left and plop it back down into the gear. Now you can turn the gear even more to the right for a higher flame.

My lighter of choice is the barbecue lighter. It's red and white and has a 4-inch square barrel that extends away from the trigger. Yes, it's overkill, but it has everything I look for in a bong lighter: big flame, safe finger position, no flints (it's piezoelectric), and refillable butane tank.

If you can't find the barbecue lighter, try to find a pipe lighter. Pipe lighters emit a tall flame at a 90- or 45-degree angle, making it easier to light a bowl.

If you're using a regular disposable lighter, keep your fingers safe by holding the bottom with your middle finger and flicking the roller with your thumb.

Above all else, though, the most important characteristic to look for in a lighter is reliability. It's depressing to be holding a packed bong, ready for a hit, and flicking the lighter over and over without getting a flame.

**Wetting the herb**

Some time ago a stoner wrote in to _High Times_ that he gets more smoke (up to three times as much) from his bud when he wets the herb.

I used to be sceptical of this claim, but now I wet the bud whenever possible. I think it not only makes the bud burn more efficiently, but it also dampens the harshness of the smoke. Try your own tests....
**Etiquette**

***Disclaimer*** This section on etiquette is meant to be a *personal* observation of stoner manners. I do not mean to imply that this is how stoners, as a whole, do or should conduct their smoking.

Bong etiquette seems to allow each person one lungful (inhalation) per turn. Everyone should get a good hit before they pass it on. The toker is also allowed to finish the chamber of smoke (carbed) on a second breath. If a person doesn't get a good amount of smoke in a hit because of a cashed bowl, they're allowed to smoke first (if going in order) from the new bowl.

The bong *and* lighter should be smoothly passed onto the next stoner. The veteran stoner will extinguish the bowl so that no bud is wasted for the next person.

Etiquette for the host suggests that s/he provide his/her guests with a spittoon (garbage can), water/drinks, and munchies (optional, but very generous!). Needless to say, the ambience should be comfortable and inviting. Bud is best enjoyed in company and with entertainment, so bud should be shared with friends.

Bowl packers are subject to a much looser constraints. It's hard to argue with the rules of the person packing bowls, since s/he is basically doing everyone else a favour. Bowl packers can be dictators and direct the route of the bong. They can also smoke as much of their own bud as they want, even if they're out of turn. The kindest bowl packers pack so much bud into a large bowl that the air can barely be sucked through it. They pass the bong around in order and re-pack the bowl liberally. Not everyone has the money to afford this philosophy, but stoners are usually generous people.

Usually the person packing bowls will take the first hit off a new bowl, but not always. It is a generous gesture when the bowl-packer first passes a fresh bowl to someone else.

A wise bowl-packer will know that quantity is not quality. The law of diminishing returns means that after a few good hits additional hits will just waste pot and put people to sleep. Wait awhile and then offer a "refresher" bong hit once everyone's buzz starts to wear off.

While stoners can be obnoxious, they are all too often labelled as "bad stoners". This unfairly derisive term means that a stoner acts goofy while stoned. It's very uncool to blame some stoner's goofy behaviour on the fact that s/he's stoned because it's too easy to make a stoner self-conscious (and that sucks). It is more polite to allow everyone to enjoy the bud in their own way and not be judgmental of others.

The best attitude to have is to relax and enjoy the company and the surroundings. Bud is finicky that way--every experienced stoner knows that you should be in a good mood when stoning.
Conclusion

I hope this article will be informative and useful to some stoners. I have tried to tighten it up, make it more readable, and remove blathering sections from the previous version.

In closing I urge all stoners to realize that there is no reason for marijuana/hemp to be illegal. Mainstream drugs like alcohol and nicotine are much more dangerous.

If marijuana is ever to be legal, it will require that stoners come out of the closet and talk openly about the benefits of pot smoking with *everyone*. Tell non-stoning friends, relatives, colleagues, co-workers, teachers, parents, etc., as much as possible. Be informed and answer questions honestly. Although it can be difficult to tell people you've known all your life that you smoke pot and think it should be legalized, it is easier than you think. If you follow up your admission with good arguments, your friends (etc.) will be forced to seriously wonder why marijuana is illegal at all.

Get organized and HAPPY STONING!