sweet maria's

Drip/Pourover/Filtercone Brewer Tip Sheet

The Chemistry of Coffee Brewing:
When brewing coffee, hot water acts as a solvent which washes the soluble solids out of the coffee grinds and into the brew. Brew methods that use paper filters allow only the soluble solids in the cup. Brew methods like French press, espresso or turkish coffee have insoluble solids suspended in the liquid. Five main factors influence control brewing results. First is the **ratio** of water-to-coffee. Second is the **particle size** of the coffee: a finer grind means more surface area of the bean is exposed to the water. Third is the **temperature of the water**, ideally between 198-204°F, since water is a better solvent at near-boiling temperature. Fourth is **contact time**, how long the water and coffee are in contact with each other. Last is **agitation**; stirring the coffee-water infusion increases extraction rate of soluble solids. Knowing these simple theories might help you troubleshoot that next bitter, weak, or flat tasting cup.

Recommended Filtercone Brewing Method

1. Rinse all paper filters with hot water to wash away loose paper fibers that can contribute to paper flavor in the finished cup. Paper taste from the filter is especially noticeable when brewing small amounts of coffee. The rinsing can also preheat your dripper and vessel, so use hot water!

2. Grind the coffee immediately before brewing. Usually a medium to medium fine grind will be best for this method. If water drains through the ground coffee very quickly and the resulting coffee tastes weak/watery, you probably want to try again with a finer grind. Conversely, if water pools and fails to drain, try again with a coarser grind. A good rule of thumb for coffee to water ratio is 8 grams of coffee for every 5 oz of water. The Specialty Coffee Association of America recommends an 18:1 ratio.

3. After the water reaches a boil, remove from the heat for 30 seconds. It should now be between 195°F to 205°F (the ideal temp range for extracting the most soluble solids). Before you start pouring, make sure your “brew bed” of ground coffee is nice and even in your dripper. Some recommend “blooming” the coffee first: pouring a small amount of water over the ground coffee, just enough to wet the grounds. Pre-wetting/blooming allows the coffee to let off some gases, and can help to ensure that all the grounds are uniformly wet to prepare for even extraction.

4. If you are blooming your grounds, allow the water to drain off the bloom for several seconds (at least 10, up to 45). You can then make your first substantial pour. Simply pour water slowly in a circular motion, staying toward the center of your brew bed. Take care to only pour directly onto your coffee, and avoid pouring down the side of the filter. If you’re pouring down the side of the filtercone, the water can bypass the coffee entirely and end up going straight into the brewed coffee, watering it down. A slow, deliberate, and even pour helps to draw out infusion time and maintain the thermal mass of the coffee/water mixture.

Further Tips

- For the most accurate brewing, it’s best to measure both your coffee and water by weight. This is easily accomplished by brewing on top of a scale. Different coffees have different densities, which means measuring coffee strictly by volume can be inconsistent.
- Brewed coffee is fresh for about 10-15 minutes. It’s better to brew the right amount of coffee than make too much and have to reheat it. Reheated coffee is not delicious.

More on brewing with a filtercone: https://www.youtube.com/watch?v=r6OdG39pfTU