Prepare your Bottles and Caps:
Clean and sanitize the bottles by either soaking the bottles in a chemical sanitizing solution or running the bottles through a dishwasher cycle without any detergent or rinsing agent. This will only work with a dishwasher that has a heat/dry cycle. Sanitize the caps by soaking them in a sanitizing solution.

Prepare your Equipment:
You will need a bottling bucket with the spigot, a hose, bottle capper and a bottle filler to conduct your bottle filling. Make sure to clean and sanitize all equipment before it comes in contact with the beer!

Priming Solution:
Add the priming sugar to 1 pint of boiling water and stir until dissolved, now "the priming solution". Allow the priming solution to cool to roughly 75°F. Pour the mixture into the bottling bucket. Using racking tubes or an auto-siphon, transfer the beer from the fermenter into the sanitized bottling bucket. Be very careful not to aerate the beer at this point – too much exposure to oxygen can cause off flavors. Mix the priming solution into the beer by gently stirring with the sanitized racking cane or auto siphon.

Bottling Filling:
Attach a sanitized hose to the spigot on the bottling bucket and the bottle filler. Turn on the spigot and allow beer to flow through the spigot and hose into bottle filler. Place the bottle filler into a bottle to fill it to 1" below the top. Place cap on top of the bottle and continue until all bottles have been filled. Now, go back and cap each bottle in the order they were filled. This delayed capping allows the dissolved CO_2 to purge the headspace of any oxygen.

Aging:
The priming solution will initiate a secondary fermentation in the bottles and provide your beer with carbonation. The beer should be left in an area away from direct sunlight where the temperature is between 68-75^{0}F, to ensure complete carbonation. After seven days, give each bottle a twist to dislodge any yeast which may be clinging to the sides of the bottles. Most beers will be best after they have aged for at least two weeks to get full carbonation. At that point go ahead and enjoy!

Great beer is meant to be shared with friends and family right? Have a cook out, bring your beers to a party, show everyone the brewmaster you have become! Try to save a few bottles (6 or so) for comparison with your next batch, as this is a good way to educate yourself.

Brewing is a journey that starts with a 5 gallon batch and leads to brewing a multitude of styles, exploring beer's rich history, and tapping into that ever-satisfying reward of enjoying the fruits of your labor. Great beer is a wonderful thing, and even more wonderful when it's yours!

Cheers!

BSG HandCraft

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TRUE BREW™ INGREDIENT KIT

PORTER

Rich, roasty, and complex in flavor, it's no wonder porters like this were favorites of working class England beginning in the 18th century. Medium-bodied with a rich, dark color, this porter features a full malt flavor. It has some hop flavor, but very little bitterness.

O.G: 1.043-1.045 **READY: 2-4 Weeks** **F.G:**

SCHEDULE/NOTES:

INVENTORY:

SPECIALTY GRAIN, CRUSHED
6 oz Crisp Pale Chocolate Malt

FERMENTABLES
1 x 3.3 lb can Dark LME
2 x 1 lb Dark DME

HOPS & FLAVORINGS
1 oz UK East Kent Golding Hop Pellets (45 Min.)
8 oz Maltodextrin

YEAST
6 g Muntons Ale Yeast

OTHER
5 oz Priming Sugar
55 ct Bottling Caps
Muslin Bag
Instruction sheet

This guide is designed to help you brew great beer from the very start. These kits are meant to help you learn the brewing process while having fun. Please read these instructions completely and become familiar with each piece of equipment and every step you will take; then, go through the kit inventory, look for any special instructions, and make sure everything is there. If you have questions please contact your local homebrew shop before you get started.

Before we get into the basic steps of brewing beer we feel that it is important to discuss the three most important parts of homebrewing; sanitation, sanitation, and sanitation! OK, that's really only one, but you get the idea. Cleaning and Sanitation are simple but necessary parts of the brewing process. Do not use abrasive cleaners or brushes that may scratch your equipment. Scratches in plastic are notorious for harboring bacteria. After all items are completely clean, soak all cleaned equipment in a sanitizing solution. Always clean and sanitize any piece of equipment, large or small, that comes in contact with the wort or beer after wort production: that means during chilling, fermentation, bottling and serving. If you are very careful to sanitize all your equipment, you can eliminate infection in your beers. However, if you become lax about sanitation, an infection will almost certainly occur. Good technique, patience and quality ingredients will result in great beer…don't let an infection ruin the party.

BASIC STEPS TO BREWING GREAT BEER

1) PREPARATION

Equipment needed:
•A homebrewing starter kit for brewing 5 gallon batches
•5 Gallon extract beer kit
•A brew pot of at least 3.5 gallons capacity for wort production
•Strainer (Optional)
•Approximately two cases of either 12 oz or 22 oz pry-off style beer bottles
•Access to running water and a burner (stove or propane burner/turkey fryer)
•An area in your home to ferment the beer – this should be away from sunlight and should not fluctuate wildly in ambient temperatures.

Taking Notes:
You should be taking complete notes about the entire process. Keep track of all steps taken, all ingredients used, how they are used, and anything else that might seem useful.
This is essential in order to adjust the recipes and improve upon them. Take more notes than you feel are necessary and later you will learn to record your steps and thoughts based on your brewing technique.

2) WORT PRODUCTION

Brewing Water:
Use this rule for choosing your brewing water: If it's good enough for drinking, it's good enough for brewing. If you have untreated well water, or you do not consume your tap water (for whatever reason) use bottled water.

Warming Extract:
Remove the lids and labels from all the cans or jars of liquid malt extract you will be using. Place the containers in a pan of warm water and let sit in this bath until their contents become viscous. This step is not strictly necessary, but it makes pouring the extract much easier and quicker.

Steeping Specialty Grains:
If your kit doesn't use grains then continue as follows. While the malt extract is loosening up in its warm bath add 2.5 gallons of water to your brew pot. Make sure that you leave enough space so that after adding the malt there will be at least a few inches of headspace to keep from boiling over. If your kit includes specialty grains, take these grains and pour them into the steeping bag. Tie the bag and place it into the pot. Bring the water to 155° F and hold at that temperature for 15 min. Do not leave grains in the water if the temperature rises above 175°F, this can cause off-flavors. Remove grain bag after 15 minutes and discard/compost.

Adding Malt Extract:
Bring the liquid in your brew pot to boil, then take the brew pot off the heat and add the malt extract while stirring constantly. By removing the pot from the heat you reduce the chances of scorching and caramelizing the extract on the bottom of the pot. Once the malt has been mixed into the water put the mixture (called the wort) back on the heat and bring to a boil. Refer to inventory list for addition times and amounts.

Adding Bittering Hops:
These are the hops that will impart bitterness to your beer. Add your bittering hops directly to the boil and allow the wort to boil for 45 minutes at a slow, rolling boil.
Be careful when adding hops to the boil as a boil-over may occur. Boil-overs are when the foam and liquid of the wort boils over the sides of the pot. Reducing heat, removing the brew pot from the heat source, and/or stirring vigorously can all help avoid a boil-over. Follow the instruction per the recipe's requirements. (Refer to inventory list for addition times and amounts)

Adding Aroma Hops:
Aroma hops are the hops that impart a finishing aroma to the beer and also add some flavor. These hops typically are added 15 to 0 minutes before the end of the 45 minute boil time. Follow instructions on addition times per the recipe's requirement. (Refer to inventory list for addition times and amounts)

Chilling the Wort:
Remove the brew pot from heat and put the lid on. Use a wort chiller or place the boiling pot into a sink or tub of cold water. Use ice if tap water is not very cold. Allow the wort to cool until the pot is cool to the touch and a thermometer reads 65 to 75°F. During this time it is very important not to allow unsanitized items to contact the wort in any way. It is critical that the wort be chilled to a temperature under 75°F. If the wort is too hot, the yeast could be damaged or even killed!

Transfer the Wort to the Fermenter:
Before transferring the chilled wort to the fermenter of your choice, make sure to clean and SANITIZE the fermenter. Once the wort is sufficiently chilled, pour the wort into the fermenter (use your sanitized strainer if desired). Top off the wort to the 5 gallon mark with cool water. Again, use a quality water source: if the water is good enough for drinking, it is good enough for brewing. If possible, splash the cool water while adding it to the wort. This oxygenates the water for the rapidly growing yeast. CAUTION: NEVER SPLASH AROUND HOT WORT! This leads to oxidation and will give you stale beer.

Taking Starting Gravity Reading:
With a sanitized measuring jar, thief and/or baster remove a small quantity of wort. Bring the removed jar of wort to 60° F, by cooling, if necessary. Float your hydrometer in the jar and give it a quick spin to dislodge any trapped air bubbles. Sight across the liquid level and record the figure from the lowest point where the surface of the wort meets the hydrometer. Make a note of where the hydrometer reads on the S.G. scale. REMEMBER – sanitize the thief or baster and any other equipment that comes in contact with the wort!

Adding Dry Yeast:
Add dry yeast to the fermenter and stir it into the wort gently with a sanitized spoon. One or two strokes should do it. It's ok if the yeast does not fully dissolve into the wort. Affix the lid and airlock, filling airlock 1/2 way with a sanitized solution of B-Brite™, Stan San, c-brite, or Iodophor. Put the fermenter away in a warm (65°F) area but away from direct sunlight.

3) FERMENTATION

You should notice the beginning of fermentation in about 24-48 hours and this will continue for 3 to 7 days, depending on the temperature. After all apparent bubbling has stopped for approximately 3 days, take another specific gravity reading, using the sanitized baster or thief, and note the reading. The decimal portion of the reading should be near a final gravity of 1.012-1.016. If the gravity is much higher than that, wait two days and take another specific gravity reading. Once the expected final gravity is reached, or the specific gravity stops changing between readings, then the beer is finished fermenting.

4) BOTTLING

Equipment needed
•Bottling bucket with spigot
•Hose
•Bottle filler
•Approximately two cases of either 12 oz or 22 oz pry-off style beer bottles
•Bottle caps
•Bottle capper
•Priming sugar, saucepan and spoon.