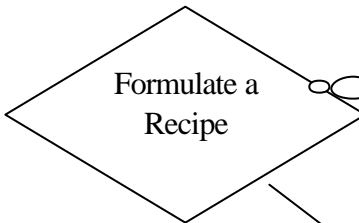


# Home Brewing All-Grain

Formulate a Recipe \* Cleaning and Sanitizing Equipment \* Preparing the Grain \* Mashing the Grain  
 Spare the Grain \* Boil the Wort \* Cool the Wort \* Ferment the Beer \* Bottle or Keg the Beer

**Make 5 Gallons  
of All-Grain  
Beer**

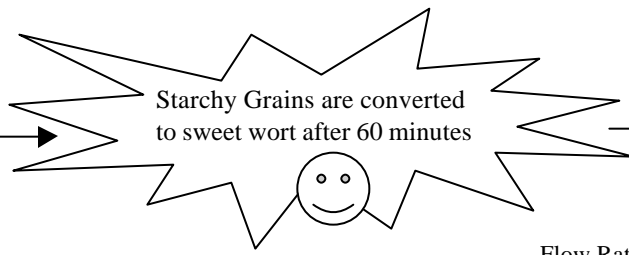
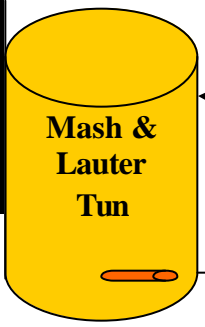


Pale Ale  
 7 Lbs Pale Malt  
 1 Lb Crystal Malt  
 3 Oz Hops

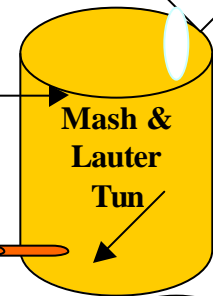
Clean and  
Sanitize  
Equipment

Crush grains in  
your Mill or have  
the Homebrew  
Supply Shop do it  
for you

Mash In  
Grains  
with 1.25  
qts/lb  
water  
to rest at  
152 F

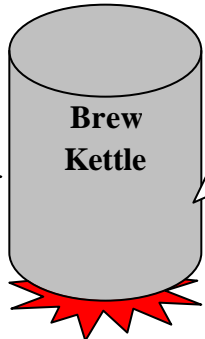


Sparge  
Water  
170F



Flow Rate  
~ 1 gal / 3 mins

Top up your  
Kettle to 5.5  
gallons and  
maintain a  
slow, rolling  
boil



Boil Wort for 1  
Hour.  
Add 1 oz Hops  
each at:  
60, 20, and 2  
minutes

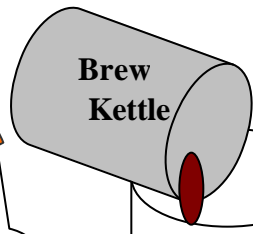


Sparge Grains  
with 167F  
Water until you  
reach a gravity  
of no less than  
1.010

Chill Wort to  
about 75 F with  
copper wort  
chiller



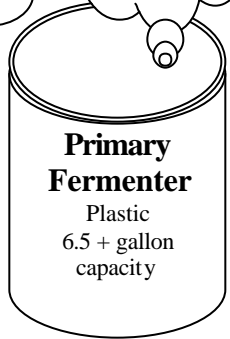
Cold  
Water  
in  
Hot  
Water  
Out

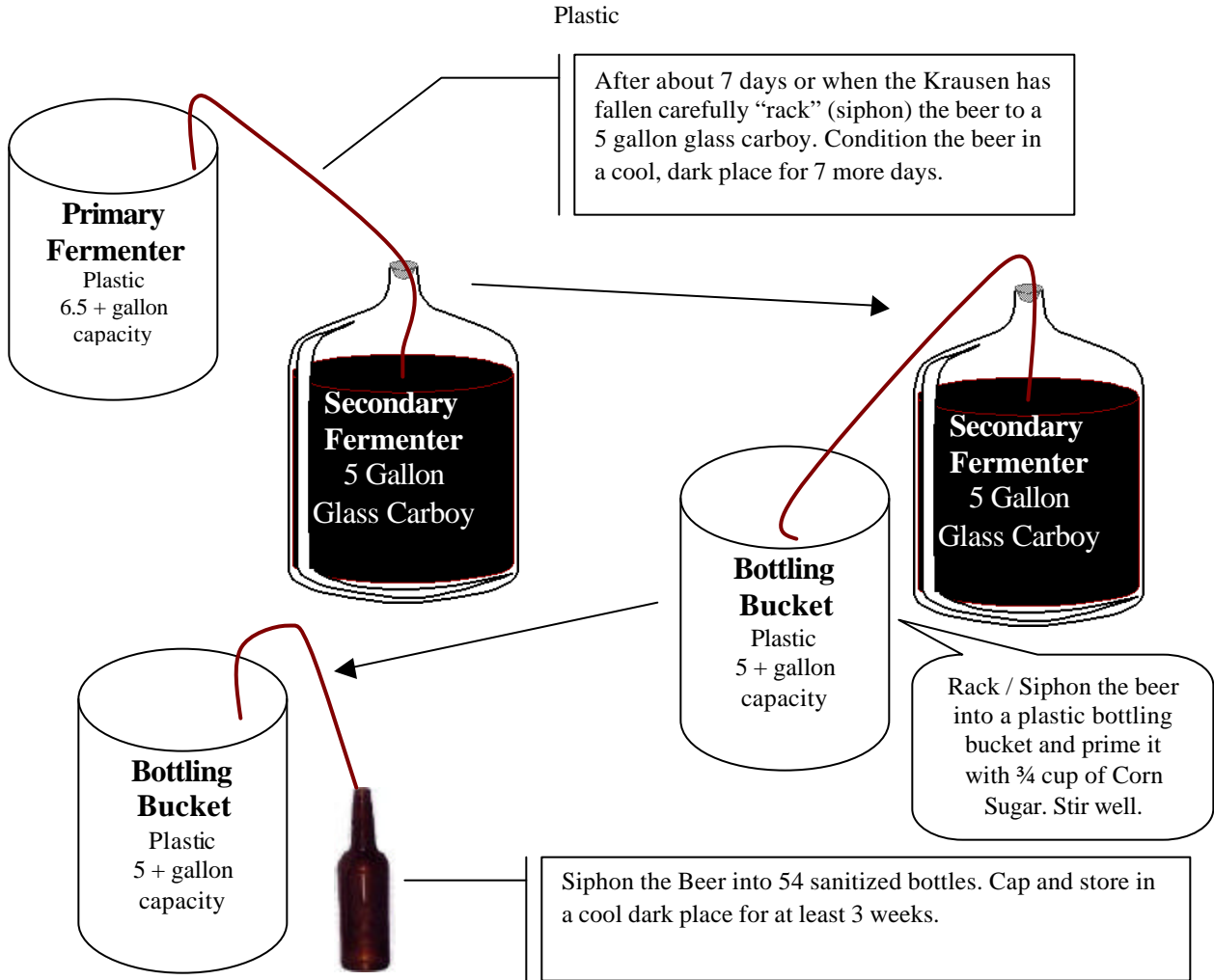


Primary  
Fermenter  
Plastic  
6.5 + gallon  
capacity

Pour the kettle into  
a fermenter. Add  
**Yeast**. Cover  
loosely and wait  
about 7 days.

Put me in  
a dark  
place at  
70F





Now, drink your beer

