

Make your own Charcoal in an oil drum

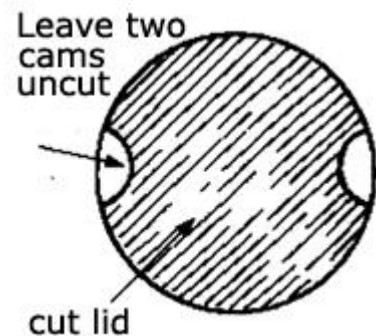
Materials and equipment to make the charcoal 'kiln'

- 50 Gallon oil drum
- Angle Grinder
- $\frac{3}{4}$ - 1" Cold Chisel
- Metal file
- Stout leather gloves
- A bucket of sand
- Matches

Make sure the oil drum is empty of all liquid before working with it. It helps to set a fire in the oil drum to burn off any waste but this is very smoky, smelly and generally unhealthy and should only be done well away from residential areas!

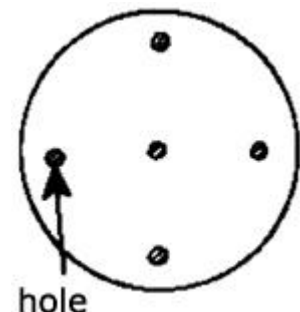
Preparing the top

- The base of the oil drum will become the top of the charcoal kiln
- Use the angle grinder to cut off the base of the oil drum. Cut from the top and inside of the metal rim. You need to leave two protruding shelves on the rim. Later these will be used to support the lid
- Wearing the leather gloves use the file to remove all the ragged edges left from the angle grinding on the drum and cut the section



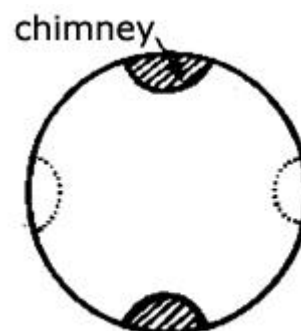
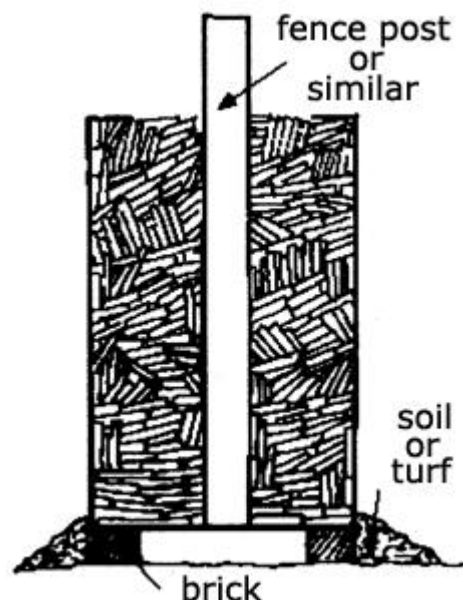
Preparing the base

- On the underside of the drum (ie the former top) use the cold chisel to punch five or so holes as shown in addition to the oil drum outlet hole



Making Charcoal

- Stand the drum on three bricks and seal the base with soil and turf except for an air inlet of 6-9 inches diameter
- Stand a post up the middle of the oil drum and then tightly pack round with $\frac{3}{4}$ " – 2" thick wood
- Pull out the vertical post and drop down a lighted firelighter, cover with more sticks and let the wood catch fire



- Once the fire is established put the cut-off section on as a lid supported by the two shelves on the oil drum.
- Seal the rim with sand - yes it has to be as this forms a good seal. You will notice that there are two holes left. These are the chimneys to allow the smoke to get out
- Thick white smoke will appear first but as the water and other material is steamed off the smoke after about three hours will change to a blue haze, which is the charcoal beginning to burn. At this point close all the air inlet/outlets and leave to stand overnight.

Problems to watch out for

More ash than charcoal: Too much air got in during the burn so the wood burnt rather than heated up. Reduce the air inlet next time and pack the turfs around the base more tightly. Did you use sand? If not use it!

Mainly inadequately charred wood (Brown ends) rather than charcoal: The burn did not get hot enough. Make sure the fire has really got established at the start before putting the lid on. Also may not be enough air got in and the air inlet at the base may need to be made larger. Sometimes the wood gets suspended in the kiln and gets out of contact with the burn. A few taps on the side helps to avoid this. Save the brown ends for the next burn.

Hostile neighbours: You underestimated the amount and smelliness of the smoke produced!