🡪we want our starting mass to be 20lbs total

🡪1 kg = 2.2lbs

🡪Therefore, 20 lbs./2.2lbs. per kg gives 9.1 kgs.

25:1 ratio (ex: ashes/hay)🡪25mols C to 1 mol N, therefore, 25 X 12 =300 g C to 14 g N, therefore, 300/314=95.5% mass is C, or 955g per kg, or 79.6 mols/kg

20:1 ratio (ex: coffee)🡪20 X 12=240 g C to 14 g N, therefore, 240/254=94.5% mass is C, or 945 g per kg or 78.8 mols/kg

30:1 ratio (ex: garden waste/weeds)🡪 30X12=360g C to 14 g N, therefore, 360/374 = 96.2% mass is C or 962g per Kg or 80.2 mols/kg

175:1 ratio (ex: newspaper)🡪175 X 12= 2100 g C to 14 g N, therefore, 2100/2114=99.4% mass is C, or 994g per kg or 82.8 mols/kg

🡪Then, multiply kg of material by mols per kg to get mols…

We want 9.1 kg X 79.6 mols/kg for 724.4 mols for a 25:1 ratio, but the total can go as high as 9.1 kg x 80.2mols/kg for 729.8 mols for a 30:1 ratio.

We have 6.8 kg of greens at 20:1

We have 6.8 kg of coffee at 20:1

We need about 6.7 kg of newspaper to get the rest of the mols of C, and get about 20.3 kgs of material…this will make the overall mix about 25.5:1, but that is close enough since as high as 30:1 is acceptable.