

Name:

## Calculations 3

The least easy calculations at GCSE start with the mass of a reactant and ask you to work out the mass you should get of the product. You could also be asked to work out how much of a particular reactant would be needed yield a particular amount of product. The calculations can be set out very methodically and are simple ratios.

What mass of calcium oxide, CaO, could be produced from the complete combustion of 20g of calcium in air?

Equation:

'How many moles?'

Put in the masses of the moles...

How much CaO is produced from 1g of Ca?

How much CaO is produced from 20g of Ca?

As long as you're careful the above approach will always work, no matter how tricky the chemistry.

What mass of sodium is needed to make 117g of sodium chloride, NaCl?