Sodium carbonate (Na_2CO_3), can be made in the reaction below

$CaCO_3 + 2NaCl \rightarrow Na_2CO_3 + CaCl_2$
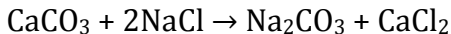
(Formula masses: $CaCO_3 = 100$ $2\ NaCl = 117$
$Na_2CO_3 = 106$ $CaCl_2 = 111$)

Use the equation below to calculate the atom economy for the production of sodium carbonate.

 Atom economy =
$\underline{\text{mass of required product}}$ ×100%
total mass of products