



- A compound of potassium has the formula  $K_2Cr_2O_7$ .
- (a) How many elements are there in this compound ?
- (b) How many atoms are there in this compound ?
- (c) Give the formula of each of the ions in this compound.







The relative atomic mass of beryllium is 9 and the relative atomic mass of titanium is 48.

- (a) How many times is an atom of beryllium heavier than an atom of carbon - 12 ?
- (b) How many times is an atom of titanium heavier than an atom of carbon -12 ?
- (c) How many times is an atom of titanium heavier than an atom of beryllium ?







03

Calculate the number of moles of each element present in 1.00 g of each of the following substances:

- (a)  $Na_3AlF_6$
- (b)  $CuSO_45H_2O$









- Determine the mass (in grams) of the following:
- (a) One molecule of water
- (b) 10 moles of  $Fe(NO_3)_3$







Calculate the percentage by mass of each element in sodium phosphate,  $Na_3PO_4$ .

- (a) Percentage by mass of Sodium
- (b) Percentage by mass of Phosphorous
- (c) Percentage by mass of Oxygen

