

How many grams of phosphorus are in a sample of $\text{Ca}_3(\text{PO}_4)_2$ that contains 50.0 g of calcium? Answer: _____ grams of phosphorus.

Answer: The mass of phosphorus that is present for given amount of calcium is 28.53 g.

Explanation:

We are given:

Mass of calcium = 50 grams

The chemical formula of calcium phosphate is

Molar mass of calcium = 40 g/mol

Molar mass of phosphorus = 31 g/mol

In 1 mole of calcium phosphate, 120 grams of calcium is combining with 62 grams of phosphorus.

So, 50 grams of calcium will combine with = of phosphorus.

Hence, the mass of phosphorus that is present for given amount of calcium is 28.53 g.

What causes air masses to move? A difference in air pressure and temperature occurs. Weather conditions change rapidly to produce storms. A collision takes place between two natural wind patterns. Long, narrow bands of wind blow in the upper atmosphere.

Excess dietary protein can cause _____. a. loss of vitamin C

b. kwashiorkor

c. loss of calcium

d. marasmus

What will be the value of bonus after the following code is executed? `int bonus, sales = 6000; if (sales < 5000) bonus = 200; else if (sales < 7500) bonus = 500; else if (sales < 10000) bonus = 750; else if (sales < 20000) bonus = 1000; else bonus = 1250;`

Help! Calculate and write the final answer using scientific notation

$(1.2 \times 10)^3 (2.5 \times 10)^?$

