But 24 grammes of ozone occupy 11.2 litres.

$\therefore$ 18 " " " $\frac{11.2}{24} \times \frac{18}{1}$

$= 8.4$ litres.

and 16 " oxygen " 11.2 litres.

$\therefore$ 82 " " " $\frac{11.2}{16} \times \frac{82}{1}$

$= 57.4$ litres.

8.4 litres of ozone and 57.4 litres of oxygen make 65.8 litres of mixed gases; these 65.8 litres of mixed gases contain 18 grammes of ozone; hence 65.8 litres of mixed gases contain 18 grammes of ozone, 1 litre of mixed gases contains $\frac{18}{65.8}$ $\therefore$ 48 97 litres of mixed gases contain $\frac{18}{65.8} \times \frac{48.97}{1} = 13.39$ grammes of ozone + $H_2O_2 = H_2O + 2O_2$. 48 parts by weight of ozone decompose 34 parts by weight of hydrogen dioxide. 48 parts of ozone decompose 34 parts of H_2O_2. 1 part decomposes $\frac{34}{48}$. 13.39 parts decomposes $\frac{34}{48} + \frac{13.39}{1} = 9.48$ grammes H_2O_2.

(To be continued.)

SCHOOL WORK.

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ARITHMETIC.

Second Grade.

I. Find the sum of 34567 + 279 + 8937 + 46 + 543 + 40 + 82341.

II. Find the difference between 8765498321 and 12349834764.

III. Add together: Four hundred and two, 75436, 49, 64730, nine hundred and seventy.

IV. How much is 9876543 - 4387 - 398 - 47?

V. How much is 47987639278 *plus* 3967-49876542?

VI. How much is 47635 + 834 + 6 × 763 + 63987 + 4?

VII. How much is 8463 + 3648 - 976 - 85?

VIII. Find the difference between 3456 + 84 and 632 + 98.

IX. How much is 47635 + 834 + 98763 + 59 + 4 + 6395?

Third Grade.

I. How much is 9876543 × 987?

II. Subtract 8376 + 9437 from 5689 × 8.

III. How much is 98 × 76 × 43?

IV. Multiply 46325 + 53627 by 49.

V. Multiply the difference between 9871-23456 and 6789321 74 by 7.

VI. How much is 847 × 94 × 68?

VII. Subtract 63 + 72 from 63 × 72.

VIII. Add together 763 × 4, 632 × 9, 834 × 7.

IX. How much is 98347 - 3469 + 27986 - 3975 - 426 - 48?

Fourth Grade.

I. How much is 9876 × 9876 ÷ 198?

II. How much is 64 × 78 × 37 × 98?

III. How much is 813456 ÷ 9 subtracted from 834 × 796?

IV. Find the sum of 1728 ÷ 9, 8271 × 9, 7281 + 9, 1287 - 9.

V. How much 6789 × 6789 ÷ 396?

VI. Divide the product of 987 × 789 by the sum of 67 and 89.

VII. How often is 674 contained in 987-6543212 - 2123456789?

VIII. How often is 938 - 769 contained in the product of 859 × 764?

IX. Find the sum of 8937 ÷ 9, 7035 ÷ 7, 4872 ÷ 8, 6356 ÷ 4.

Fifth Grade.

I. How much is 9876 × 9876 ÷ 1967?