

(18) Dilution Moles start = Moles end  
 $M \times l = M \times l$

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Titration (Neutralization) Moles Acid = Moles Base  
 $n_A \times M \times l = n_B \times M \times l$

Jan 20-7:43 AM

(14)  $Mg \overset{\cdot\cdot}{(C_2H_3O_2)}_2 \Rightarrow Mg^{+2} + 2(C_2H_3O_2)^{-1}$   
Ionic covalent

$\frac{0.6 \text{ mole}}{0.135 \text{ L}}$ $4.44 \text{ M } Mg(C_2H_3O_2)_2$ 1	$\frac{4.44}{1}$ 1	$\frac{8.88}{2}$ 2
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Jan 20-8:01 AM

(16)

0.450 J	35.2 g	5.8 K
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$Q = C M \Delta T$

Time sec

Jan 20-8:09 AM

(25) [A-]  $4s^1 3d^5$

$4s^2 3d^4$

$18 + 1 + 5 = 24 e^-$

Jan 20-8:19 AM

(26)

O is a -2 ox

Excess

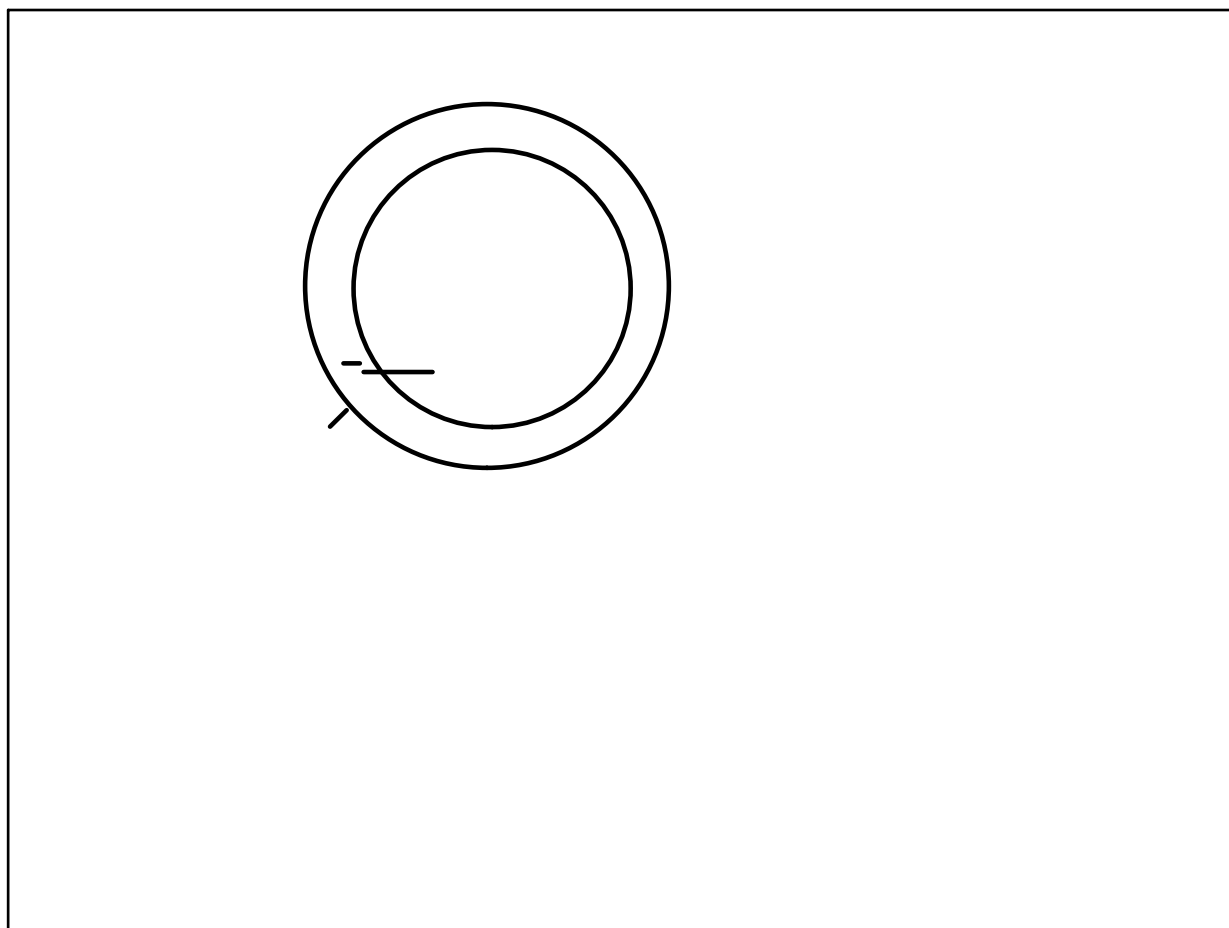
① Peroxide (-1) | ② Superoxide (-1/2)

$(\text{As})_2\text{O}_2$  |  $\text{P}_2\text{O}_5$

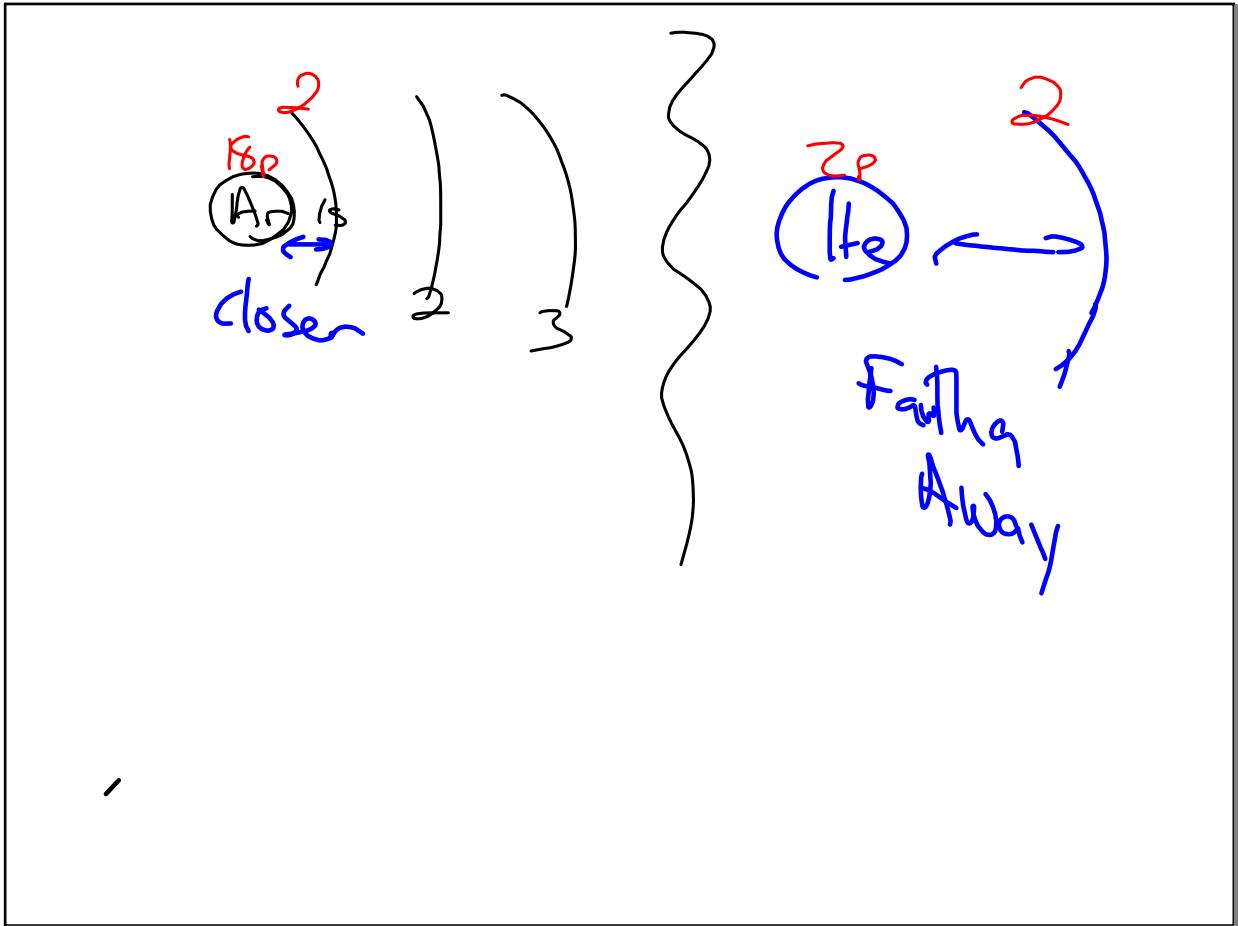
$(\text{As})_2\text{O}_2$  |  $\text{K}_2\text{O}_2$

Diagram showing oxidation states:  $+4$  and  $-2$  with arrows indicating electron transfer. A circled  $-4$  is shown with an arrow pointing to a circled  $-2$ , resulting in a circled  $-4$  and a circled  $-2$ .

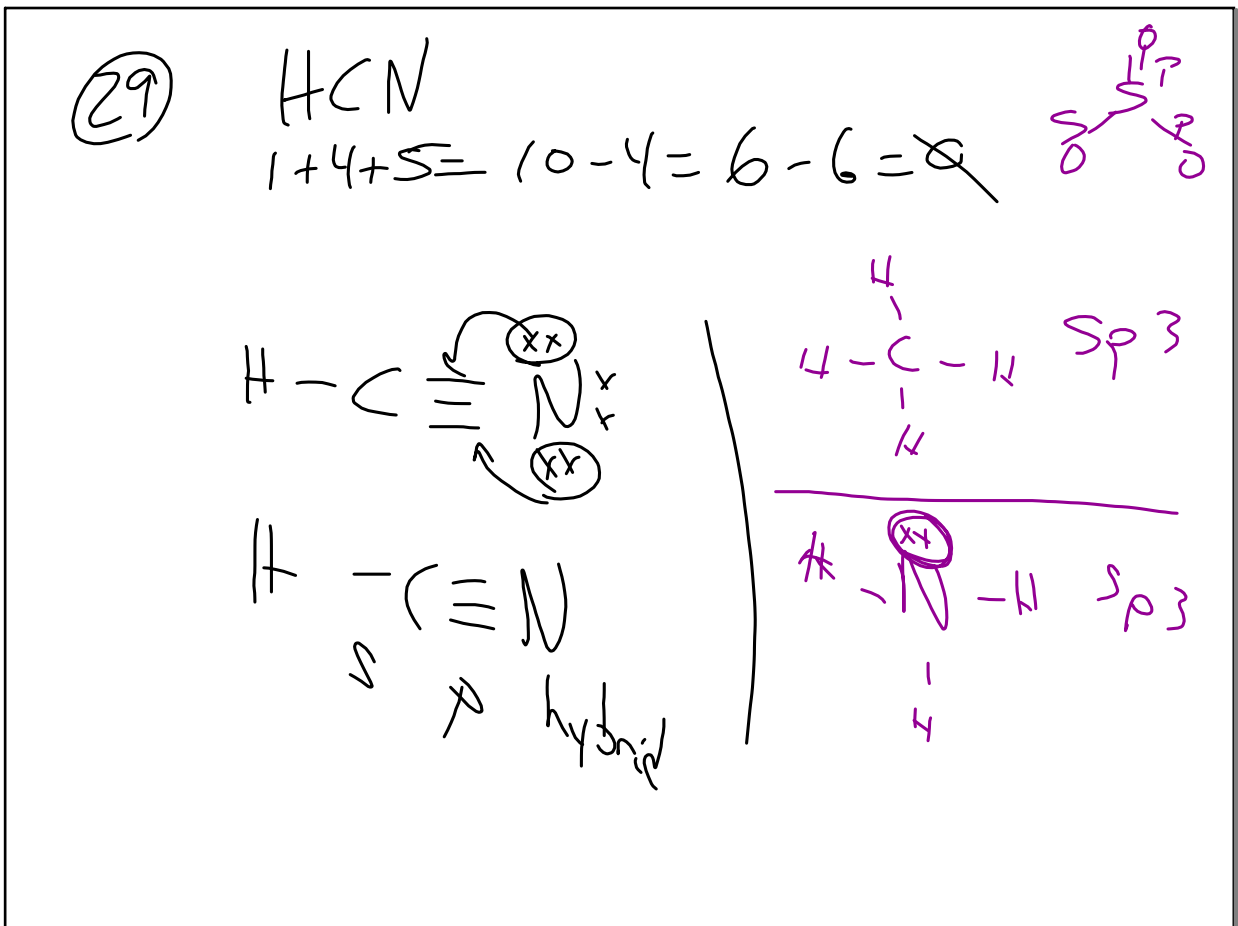
Jan 20-8:23 AM



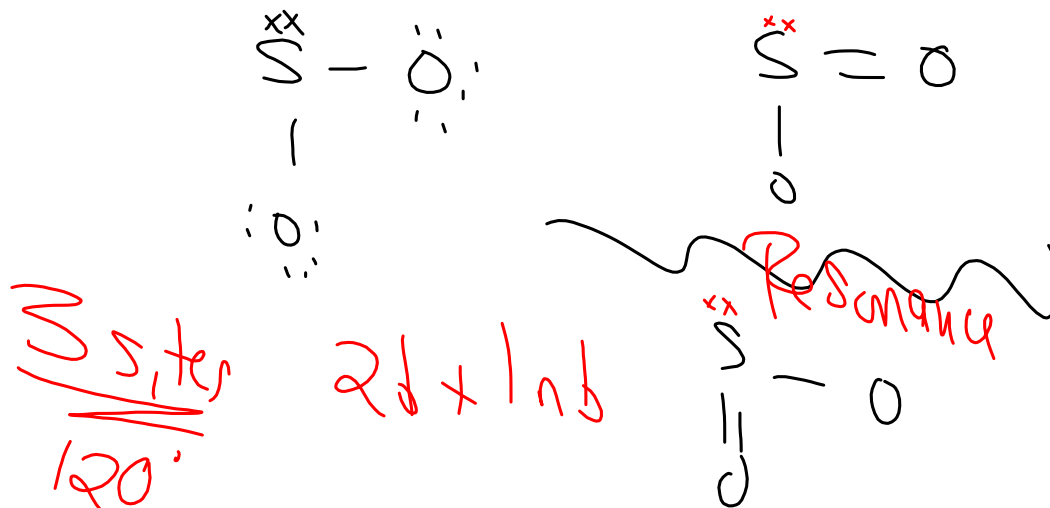
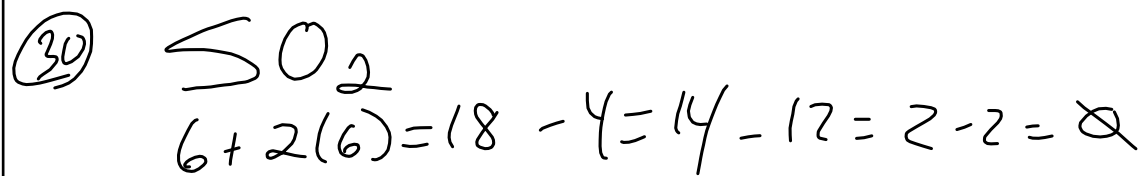
Jan 20-8:34 AM



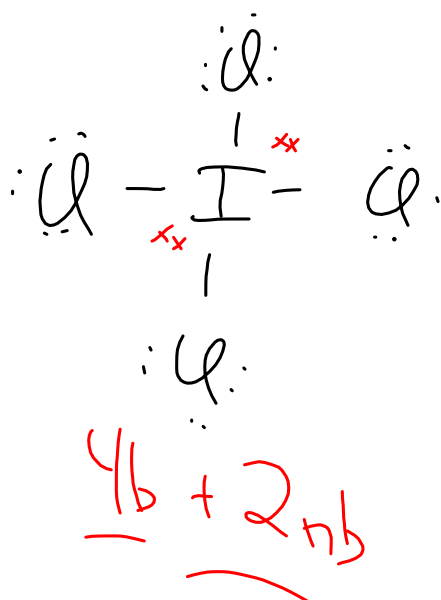
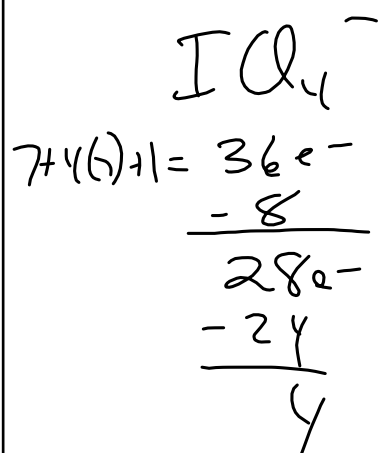
Jan 20-8:36 AM



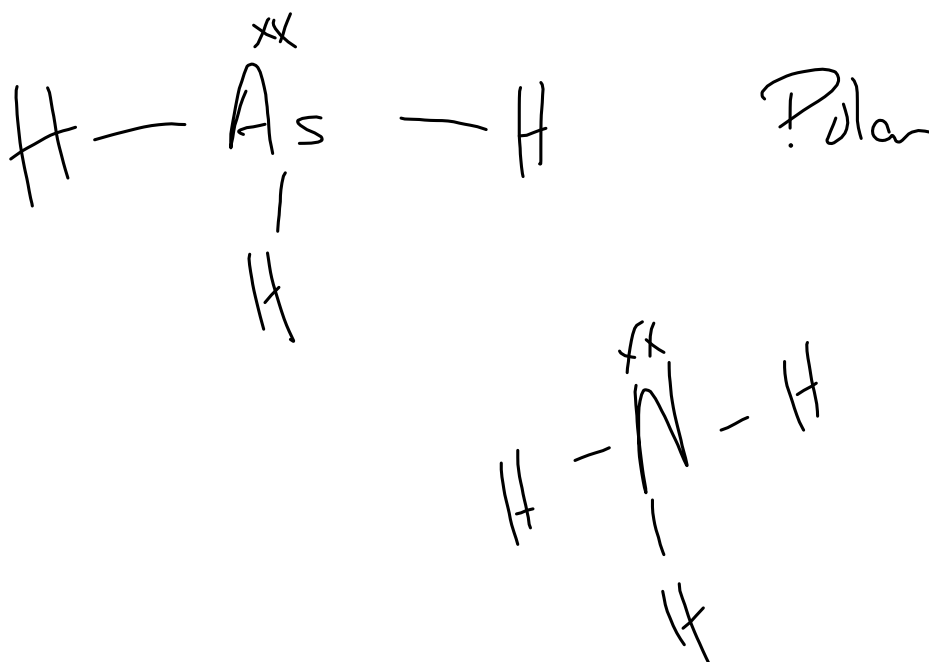
Jan 20-8:43 AM



Jan 20-8:47 AM



Jan 20-8:54 AM



Jan 20-8:57 AM

$$\frac{PV}{T}$$

$$P \times V = \text{const}$$
$$\frac{P}{T} =$$
$$\frac{V}{T} =$$

Jan 20-9:02 AM

(40)

 $2 \text{ moles He} + 5 \text{ moles Ne}$   
 $\text{He} + \text{Ne}$  $= 7 \text{ moles TOTAL}$ 

$$P_T = 2.6 \text{ atm}$$

$$P_{\text{He}} = X_{\text{He}} P_T$$
$$= \frac{2}{7} (2.6)$$

Jan 20-9:03 AM