$2Na + 2HOH \rightarrow 2NaOH + H_2\uparrow$

(Base)

GAS

EXPLODE

Nov 7-7:23 AM

PS7

(3!) Most stable +2 ox state

f - can hold 14e- (full)

7, 111 "stable"

Nov 7-8:07 AM

Exam 2 2017

① $NO + O_3 \rightarrow NO_2 + O_2$ -198.9

$O \rightarrow \frac{1}{2}O_2$ $-\frac{1}{2}(495)$

$\frac{3}{2}O_2 \rightarrow O_3$ $+(142.3)$

Nov 7-8:13 AM

MOLE RATIO 1 : 3 : 1 : 3 : 3 : 336

③ $CH_4 + 3Cl_2 \rightarrow CHCl_3 + 3HCl + 336\ KJ$

$$\frac{23g\ HCl}{36g\ HCl} \left| \frac{1\ Mole\ HCl}{3\ Mole\ HCl} \right| \frac{336\ KJ}{36.5g}$$

Nov 7-8:20 AM

④ $\frac{15.57\ KJ}{9\ glucose}$, 2.5g glucose, 20.55 → 23.25°C

$\Delta T = 27°C$

Find $KJ\ °C^{-1}$ or $\frac{KJ}{°C}$

15.57 KJ | 2.5 g glucose

9 glucose | 27 °C

Nov 7-8:24 AM

⑤ Ni 28e⁻

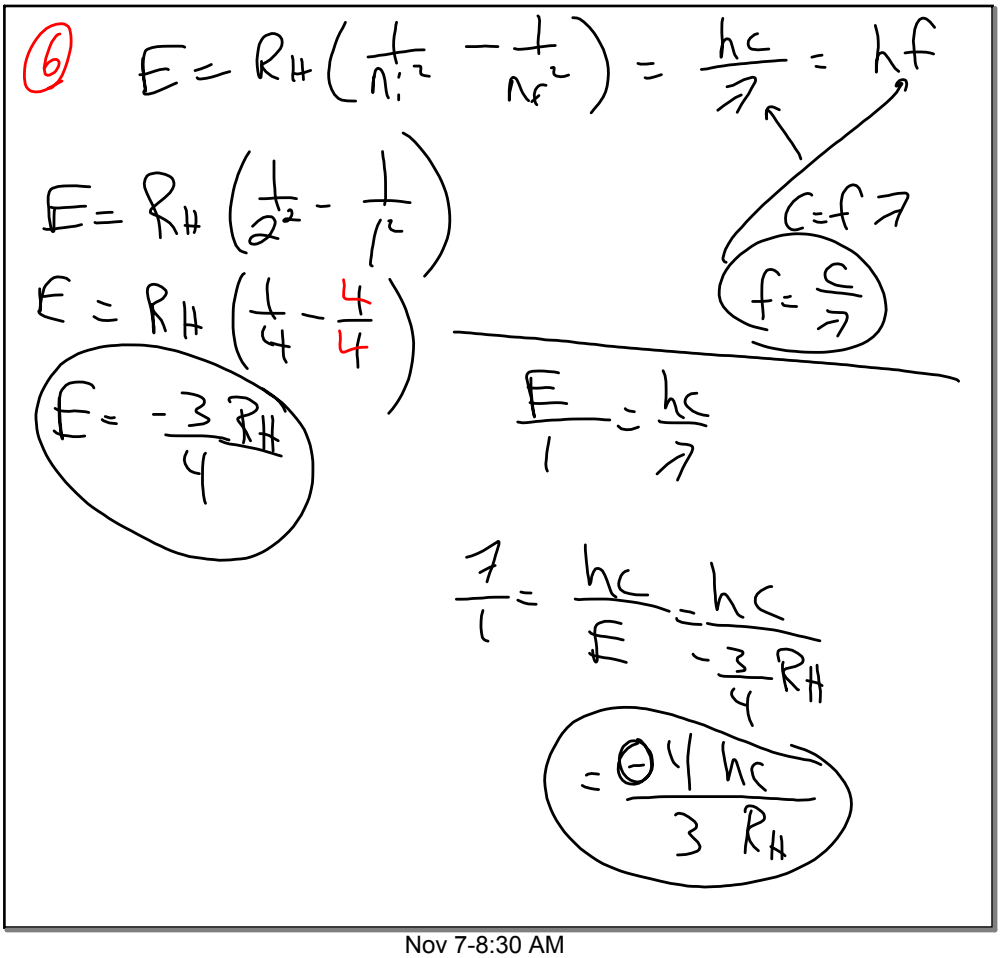
$1s^2\ 2s^2\ 2p^6\ 3s^2 3p^6\ 4s^2\ 3d^8$

10 8

18

↑↓ ↑↓ ↑↓ ↑ ↑

Nov 7-8:27 AM



Nov 7-8:30 AM

$$\Delta H_{rxn} = n\Sigma\Delta H_{prod} - n\Sigma\Delta H_{react}$$

16 $1s^2 2s^2 2p^6 3s^2 3p^6$ $4s^2 3d^{10} 4p^1$

Ar

Nov 7-8:34 AM