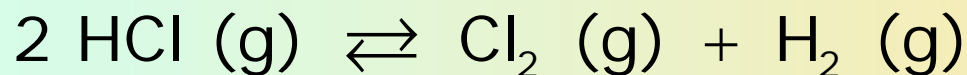
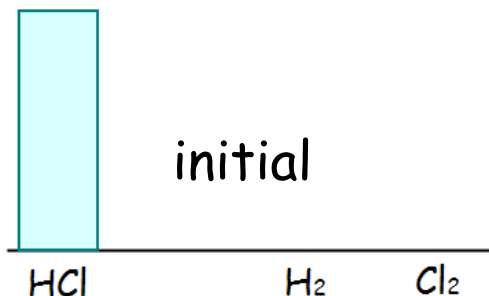


Equilibrium: conceptual questions

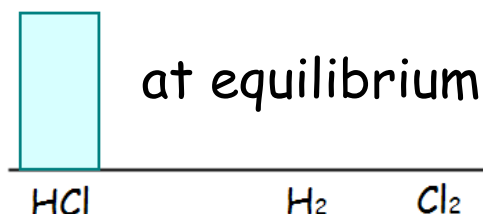
Consider this chemical equation and fill in the blanks



$n = 10 \text{ mol}$
 $p = 5 \text{ atm}$



$n = 6 \text{ mol}$



$$p = n \cdot \frac{RT}{V} \rightarrow \frac{p}{p_0} = \frac{n}{n_0}$$

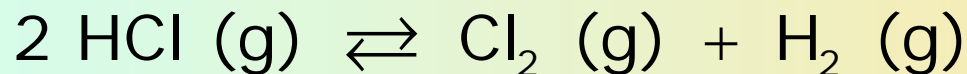
α	0.40
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		HCl	H ₂	Cl ₂
initial	n_0	10	0	0
change	Δn	-4	2	2
at equil.	n	6	2	2

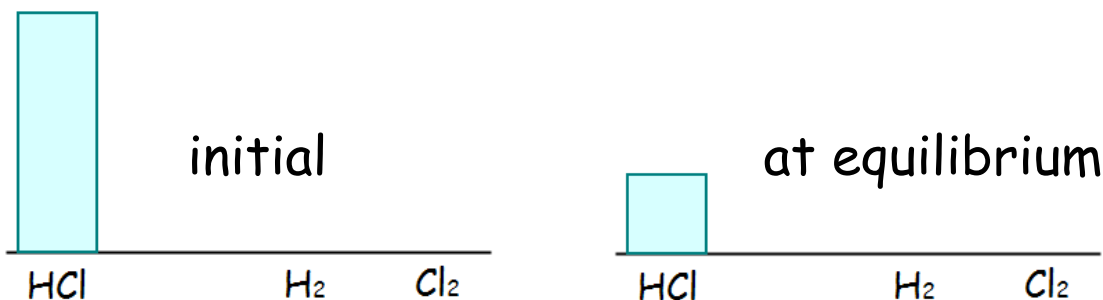
		HCl	H ₂	Cl ₂
initial	p_0	5	0	0
change	Δp	-2	1	1
at equil.	p	3	1	1

Equilibrium: conceptual questions

Consider this chemical equation and fill in the blanks



$n = 10 \text{ mol}$
 $p = 5 \text{ atm}$



$$p = n \cdot \frac{RT}{V} \rightarrow \frac{p}{p_0} = \frac{n}{n_0}$$

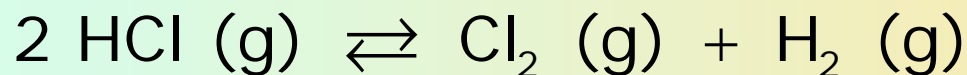
α 0.70

		HCl	H ₂	Cl ₂
initial	n_0	10	0	0
change	Δn	-7	3.5	3.5
at equil.	n	3	3.5	3.5

		HCl	H ₂	Cl ₂
initial	p_0	5	0	0
change	Δp	-3.5	1.75	1.75
at equil.	p	1.5	1.75	1.75

Equilibrium: conceptual questions

Consider this chemical equation and fill in the blanks



$n = 10 \text{ mol}$
 $p = 5 \text{ atm}$

at equilibrium

initial

$p = 2 \text{ atm}$

HCl

H₂

Cl₂

HCl

H₂

Cl₂

$$p = n \cdot \frac{RT}{V} \rightarrow \frac{p}{p_0} = \frac{n}{n_0}$$

α

0.80

		HCl	H ₂	Cl ₂
initial	n_0	10	0	0
change	Δn	-8	4	4
at equil.	n	2	4	4

		HCl	H ₂	Cl ₂
initial	p_0	5	0	0
change	Δp	-4	2	2
at equil.	p	1	2	2