

An acid is a proton (H⁺) donor and a base is a proton acceptor.

Brønsted-Lowry acid-base reaction = a reaction involving the transfer of a proton

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Bronsted-Lowry acid-base reaction = a reaction involving the transfer of a proton

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Acid Base

HCl + NaOH \rightarrow NaCl + H_2O

H^+
Acid Base

HNO_3 + NH_3 \rightarrow NH_4NO_3
```

```
Acid Base
HCI + NaOH \rightarrow NaCI + H_2O

Base Acid
NaCI + H_2O \rightarrow HCI + NaOH
```

Acid Base

$$HCl + NaOH \rightarrow NaCl + H_2O$$

Base Acid
$$NaCl + H_2O \rightarrow HCl + NaOH$$

$$HCI + NaOH \rightarrow NaCI + H_2O$$

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Acid Base Base Acid
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Acid 1 Base Base 1 Acid

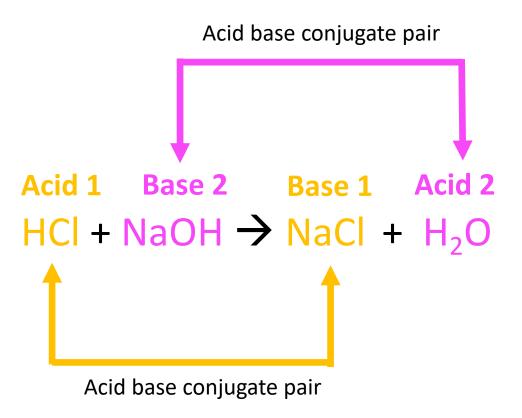
$$HCl + NaOH \rightarrow NaCl + H_2O$$

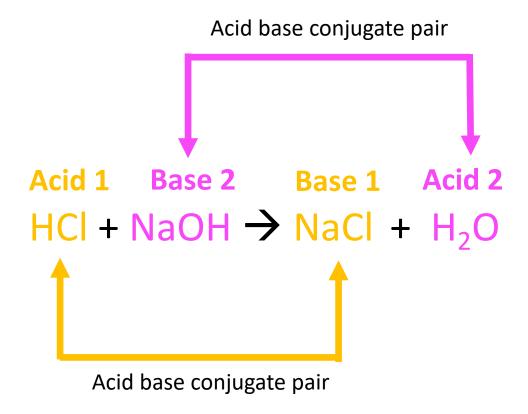
```
Acid Base
HCl + NaOH \rightarrow NaCl + H_2O

Base Acid
NaCl + H_2O \rightarrow HCl + NaOH
```

Acid 1 Base 2 Base 1 Acid 2

$$HCl + NaOH \rightarrow NaCl + H_2O$$





Conjugate acid base pairs are chemicals which have the same formula except that the acid has an extra H⁺ in its formula.

Conjugate acid	Conjugate base
HCl	Cl ⁻
H ₂ O	OH-
HNO ₂ ²⁺	NO ₂ ⁺
H ₃ O ⁺	H ₂ O



Check up quiz

1) KOH + HCOOH
$$\rightarrow$$
 HCOOK + H₂O

2)
$$HCO_3^- + OH^- \rightarrow CO_3^{2-} + H_2O$$

3)
$$HCO_3^- + H^+ \rightarrow CO_2 + H_2O$$

4)
$$H_2SO_4 + HNO_3 \rightarrow HSO_4 + H_2NO_3 +$$

5)
$$CH_3COOH + HCI \rightarrow CH_3COOH_2^+ + CI^-$$

Answers coming up now...

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Base 2 Acid 1 Base 1 Acid 2

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Acid 1 Base 2 Base 1 Acid 2
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Base 2 Acid 1 Base 1 Acid 2
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Acid 1 Base 2 Base 1 Acid 2
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