

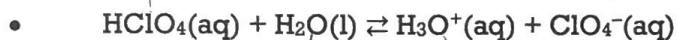
## Conjugate Pairs Practice Questions

REMEMBER...The Bronsted-Lowry Theory States

- Bases accept H<sup>+</sup> and acids donate H<sup>+</sup>
- A conjugate base is what remains after the acid gives up H<sup>+</sup>.
- A conjugate acid is what is formed when a base accepts a proton.

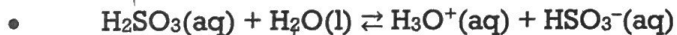
*B*ase *A*ccpt *A*cid *D*onate

**Directions:** Identify the acid, base, conjugate acid, and conjugate base.



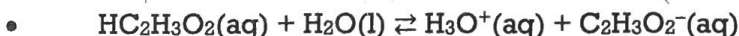
1. Which compound will donate a proton? HClO<sub>4</sub>
2. What does the compound look like after it donates a proton? ClO<sub>4</sub><sup>-</sup>
3. Which compound will accept a proton? H<sub>2</sub>O
4. What does the compound look like after it accepts a proton? H<sub>3</sub>O<sup>+</sup>
5. Identify the acid, base, conjugate acid, conjugate base below

Acid	Conjugate Base	Base	Conjugate Acid
HClO <sub>4</sub>	ClO <sub>4</sub> <sup>-</sup>	H <sub>2</sub> O	H <sub>3</sub> O <sup>+</sup>



1. Which compound will donate a proton? H<sub>2</sub>SO<sub>3</sub>
2. What does the compound look like after it donates a proton? HSO<sub>3</sub><sup>-</sup>
3. Which compound will accept a proton? H<sub>2</sub>O
4. What does the compound look like after it accepts a proton? H<sub>3</sub>O<sup>+</sup>
5. Identify the acid, base, conjugate acid, conjugate base below

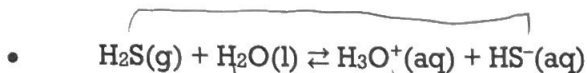
Acid	Conjugate Base	Base	Conjugate Acid
H <sub>2</sub> SO <sub>3</sub>	HSO <sub>3</sub> <sup>-</sup>	H <sub>2</sub> O	H <sub>3</sub> O <sup>+</sup>



1. Which compound will donate a proton? HC<sub>2</sub>H<sub>3</sub>O<sub>2</sub>
2. What does the compound look like after it donates a proton? C<sub>2</sub>H<sub>3</sub>O<sub>2</sub><sup>-</sup>
3. Which compound will accept a proton? H<sub>2</sub>O
4. What does the compound look like after it accepts a proton? H<sub>3</sub>O<sup>+</sup>
5. Identify the acid, base, conjugate acid, conjugate base below

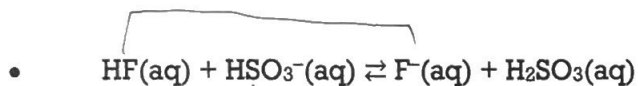
Acid	Conjugate Base	Base	Conjugate Acid
HC <sub>2</sub> H <sub>3</sub> O <sub>2</sub>	C <sub>2</sub> H <sub>3</sub> O <sub>2</sub> <sup>-</sup>	H <sub>2</sub> O	H <sub>3</sub> O <sup>+</sup>

Name: KEY Official Class: \_\_\_\_\_ Date: \_\_\_\_\_  
 Teacher: \_\_\_\_\_ Period: \_\_\_\_\_ Class: \_\_\_\_\_



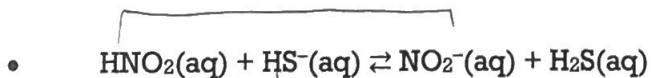
1. Which compound will donate a proton?  $\text{H}_2\text{S}$
2. What does the compound look like after it donates a proton?  $\text{HS}^-$
3. Which compound will accept a proton?  $\text{H}_2\text{O}$
4. What does the compound look like after it accepts a proton?  $\text{H}_3\text{O}^+$
5. Identify the acid, base, conjugate acid, conjugate base below

Acid	Conjugate Base	Base	Conjugate Acid
<u><math>\text{H}_2\text{S}</math></u>	<u><math>\text{HS}^-</math></u>	<u><math>\text{H}_2\text{O}</math></u>	<u><math>\text{H}_3\text{O}^+</math></u>



1. Which compound will donate a proton?  $\text{HF}$
2. What does the compound look like after it donates a proton?  $\text{F}^-$
3. Which compound will accept a proton?  $\text{HSO}_3^-$
4. What does the compound look like after it accepts a proton?  $\text{H}_2\text{SO}_4$
5. Identify the acid, base, conjugate acid, conjugate base below

Acid	Conjugate Base	Base	Conjugate Acid
<u><math>\text{HF}</math></u>	<u><math>\text{F}^-</math></u>	<u><math>\text{HSO}_3^-</math></u>	<u><math>\text{H}_2\text{SO}_4</math></u>



1. Which compound will donate a proton?  $\text{HNO}_2$
2. What does the compound look like after it donates a proton?  $\text{NO}_2^-$
3. Which compound will accept a proton?  $\text{HS}^-$
4. What does the compound look like after it accepts a proton?  $\text{H}_2\text{S}$
5. Identify the acid, base, conjugate acid, conjugate base below

Acid	Conjugate Base	Base	Conjugate Acid
<u><math>\text{HNO}_2</math></u>	<u><math>\text{NO}_2^-</math></u>	<u><math>\text{HS}^-</math></u>	<u><math>\text{H}_2\text{S}</math></u>

