

## 18.10 Predicting the Results of an Acid/Base Reaction (Video)

This project was preformed to supply **Libretext authors** with videos on General Chemistry topics which can be used to enhance their projects. Also, these videos are meant to act as a learning resource for **all General Chemistry students**.

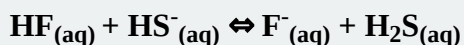
### Video Topics

**This video discusses how to predict the results of an acid/base reaction by comparing Ka's.**

For a given Bronsted acid/base reaction there will an acidic species on either side of the arrow.

The equilibrium will favor the side with the weakest acid.

K<sub>a</sub>'s, pK<sub>a</sub>'s or structural features can be used to determine the weakest acid.



$$K_a \text{ for HF} = 7.2 \times 10^{-4}$$

$$K_a \text{ for H}_2\text{S} = 1 \times 10^{-7}$$

H<sub>2</sub>S is the weaker acid therefore the equilibrium will lie to the right.

So {H<sub>2</sub>S} > {HS<sup>-</sup>} and {F<sup>-</sup>} > {HF}

### Link to Video

Predicting the Results of an Acid/Base Reaction: <https://youtu.be/4zI4k6DZ83k>



### Attribution

- Prof. Steven Farmer ([Sonoma State University](#))

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