

Indicators Worksheet

What is the definition of an indicator?

Write the equilibrium equation for an indicator?

Colors for methyl orange HInd _____ Ind^- _____

Compare the relative sizes of $[\text{HInd}]$ and $[\text{Ind}^-]$ at the following pH's for methyl orange.

	Color	Relationship
pH = 2.0	_____	_____
pH = 3.7	_____	_____
pH = 5.0	_____	_____

HCl is added to methyl orange, describe if each increases or decreases.

$[\text{H}^+]$ _____

$[\text{HInd}]$ _____

$[\text{Ind}^-]$ _____

Color Change _____

NaOH is added to methyl orange, describe if each increases or decreases.

$[\text{H}^+]$ _____

$[\text{HInd}]$ _____

$[\text{Ind}^-]$ _____

Color Change _____