

CHAPTER 17	pH Calculations Answer Key	BLM 17.3.6A
ANSWER KEY		

1. Answers appear in *italics*.

Substance	$[\text{H}_3\text{O}^+]$	pH	Acidic, Basic, or Neutral?
(a) household ammonia	$1.25 \times 10^{-12}$	<i>11.9</i>	<i>basic</i>
(b) tomatoes	$6.3 \times 10^{-5}$	4.2	<i>acidic</i>
(c) blood	$4.0 \times 10^{-8}$	<i>7.4</i>	basic
(d) pure water	$1.0 \times 10^{-7}$	7	<i>neutral</i>

2. (a)  $[\text{OH}^-]$

(b)  $[\text{H}_3\text{O}^+]$

(c)  $[\text{OH}^-]$

(d) They are equal.

3. (a) weak base

(b) weak acid

(c) weak base

(d) neutral

4. (a)  $1.0 \times 10^0$ , pH = 0

(b) strong acid