

14. Consider the following pH values for a range of substances.

pH	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Substance	Battery acid	Stomach acid	Lemon juice	Orange juice	Beer	Black coffee	Milk	Blood	Sea water	Toothpaste	Laundry detergent	Bathroom cleaner	Hair straightener	Oven cleaner	Drain cleaner

Based on these pH values, which one of the following statements about the concentration of hydronium ions is true?

- (a) It is 1000 times greater in sea water than in bathroom cleaner.
- (b) It is twice as great in beer as it is in lemon juice.
- (c) It is three times greater in beer than in hair straightener.
- (d) It is 1 000 000 times greater in hair straightener than in milk.