

Name:

Period:

Seat#:

1) What is pH a measure of?	2) What is the equation used for finding pH?
3) What is the equation that relates pH and pOH?	4) What numbers on the pH scale are acidic, basic, neutral?
5) Classify each as acidic, neutral, or basic: a. Tomatoes = 4.2 b. Eggs = 7.8	c. Soil = 5.5 d. Milk = 6.4 e. Ammonia = 11.0

What would the pH of the following be? Complete the following calculations.  
Make sure to show your work.

6) 0.0010 M HCl	7) 0.0010 M HNO <sub>3</sub>
8) 0.010 M NaOH	9) 0.0035 M HCl
10) 0.024 M HCl	11) 0.075 M KOH
12) 0.000034 M HCl	13) 0.000000000001 M HCl

Dougherty Valley HS Chemistry  
Acids & Bases – pH Calculations

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Watch the following video and take detailed and thorough notes. You may fill the area with a paragraph if you would prefer. <http://tinyurl.com/crashcourseacidrain>

Complete the following table. The first one is done as an example. You do not need to show work for these ones! If you need to show work, then attach a piece of binder paper to this handout.

	[H <sup>+</sup> ] M	[OH <sup>-</sup> ] M	pH	pOH	Acidic, base, neutral
a.	$1.0 \times 10^{-3}$	$1.0 \times 10^{-11}$	3	11	Acidic
b.		$1.0 \times 10^{-5}$			
c.			10.00		
d.				6.00	
e.	0.010				
f.		0.0000010			
g.			4.00		
h.				7.00	
i.	$3.2 \times 10^{-3}$				
j.		$1.8 \times 10^{-14}$			
k.			10.23		
l.				6.78	
m.	0.0050				
n.		0.000011			
o.			10.97		
p.				7.01	