Lesson Plan :

Friday, April 29, 2016

4th Period.

Chemistry

Room 3043

Mr Genest

0) Queue up the video by going to http://genest.weebly.com. Plug in the speakers to the laptop. (There is a large black volume control for the speakers on the speaker cord.) Have the Blender Worksheet on a stool near the door to pick up on the way in . Or pass it out.

1) Once you have taken attendance explain that today’s sheet is due at the bell. There will be no quiz today (they usually expect a Friday quiz.)

2) Ask for a volunteer to read Problem #1

3) Instruct students to have a pen ready to copy the solution from the video.

4) Play the video, pausing if necessary.

5) Let students work a few from the front

6) Ask for a volunteer to read #5 on the back

7) Instruct students to have a pen ready to copy the solution from the video.

8) Play the video, and cease at 5.5 minutes (skip the rest of the video).

9) Students are to finish the problems and turn in at the bell. Problems turned in Monday will be graded half off.

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| CλeMis+ry: http://genest.weebly.com Stop in for help every day at lunch and Tues &Thurs after school! |  | Name\_\_\_\_\_\_\_\_\_Period\_\_\_\_\_\_\_\_ |

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|  | ***Watch and copy the solution.***1. Given the following equation, how many mL of 0.569 M HCl solution is required to react completely with 3.45 g of solid magnesium?

Mg(s) + 2 HCl(aq) MgCl2(aq) + H2(g)Manual link for the video “Stoichiometry with Molarity” by Doc Lenczewski https://www.youtube.com/watch?v=uTDohsiIVFE |
| **Stoichiometry with Molarity** with Doc LenczewskiClick the link at genest.weebly.com to watch a 4 minute solution to this |

1. Based on the reaction shown in #1, how many mL of 0.380M HCl solution is required to react completely with 22.5 grams of magnesium?
2. Based on the reaction shown in #1, how many liters of hydrogen will be produced at STP if excess magnesium reacts with 0.0338L of 0.20M HCl?

$\frac{ 0.0338 L HCl }{1}x\left(\frac{\\_\\_\\_\\_\\_ mol HCl }{\\_\\_\\_\\_\\_\\_\\_ L HCl}\right)x\left(\frac{ \\_\\_\\_\\_\\_ mol H\_{2}}{\\_\\_\\_\\_\\_ mol HCl}\right)x\left(\frac{\\_\\_\\_\\_\\_ L H\_{2}}{\\_\\_\\_\\_\\_ mol H\_{2}}\right)$=

1. Based on the reaction shown in #1, if 344 mL of hydrogen at STP is formed by the reaction,
	1. how many moles of MgCl2 should form?
	2. and then, based on your answer in (a), calculate the molarity of the MgCl2 that forms? Assume the reaction takes place in a container that contains 0.266 L of water.

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|  | ***Watch and copy the solution.***1. For the reaction below, what volume of 1.2M Na2CO3 is needed to react with 5.0 L of 0.30 M AlCl3?

3Na2CO3(aq) + 2AlCl3(aq) Al2(CO3)3(s) + 6NaCl(aq)Manual link to video:https://www.youtube.com/watch?v=rPND65LPwS0 “ Solution Stoichiometry tutorial: How to use molarity in stoichiometry” |
| **Click LINK 2 at http://genest.weebly.com**  As you watch, write down the solution shown on the video.Stop watching after 06:30 mm:ss |

1. Balance the equation shown here: \_\_\_\_ Pb(OH)2 + \_\_\_\_ HCl 🡪 \_\_\_\_ H2O + \_\_\_\_ PbCl2
2. Based on the equation in the previous problema, if 45 mL of a 0.100M solution of Pb(OH)2 reacts, what volume of 0.740M HCl will react?
3. Balance the equation shown here: \_\_\_\_KOH(aq) + \_\_\_\_H3PO4(aq) → \_\_\_\_K3PO4(aq) + \_\_\_\_H2O(l)
4. Based on the equation in the previous problema, if 0.975L of a 0.050M solution of Pb(OH)2 reacts, what volume of 1.3M HCl will react?
5. Write the formula you have memorized for calculating the concentration. (HInt: it is something equals, something divided by something.)
6. How many grams of silver nitrate are needed to prepare 250 mL of standard
0.100 M silver nitrate solution?