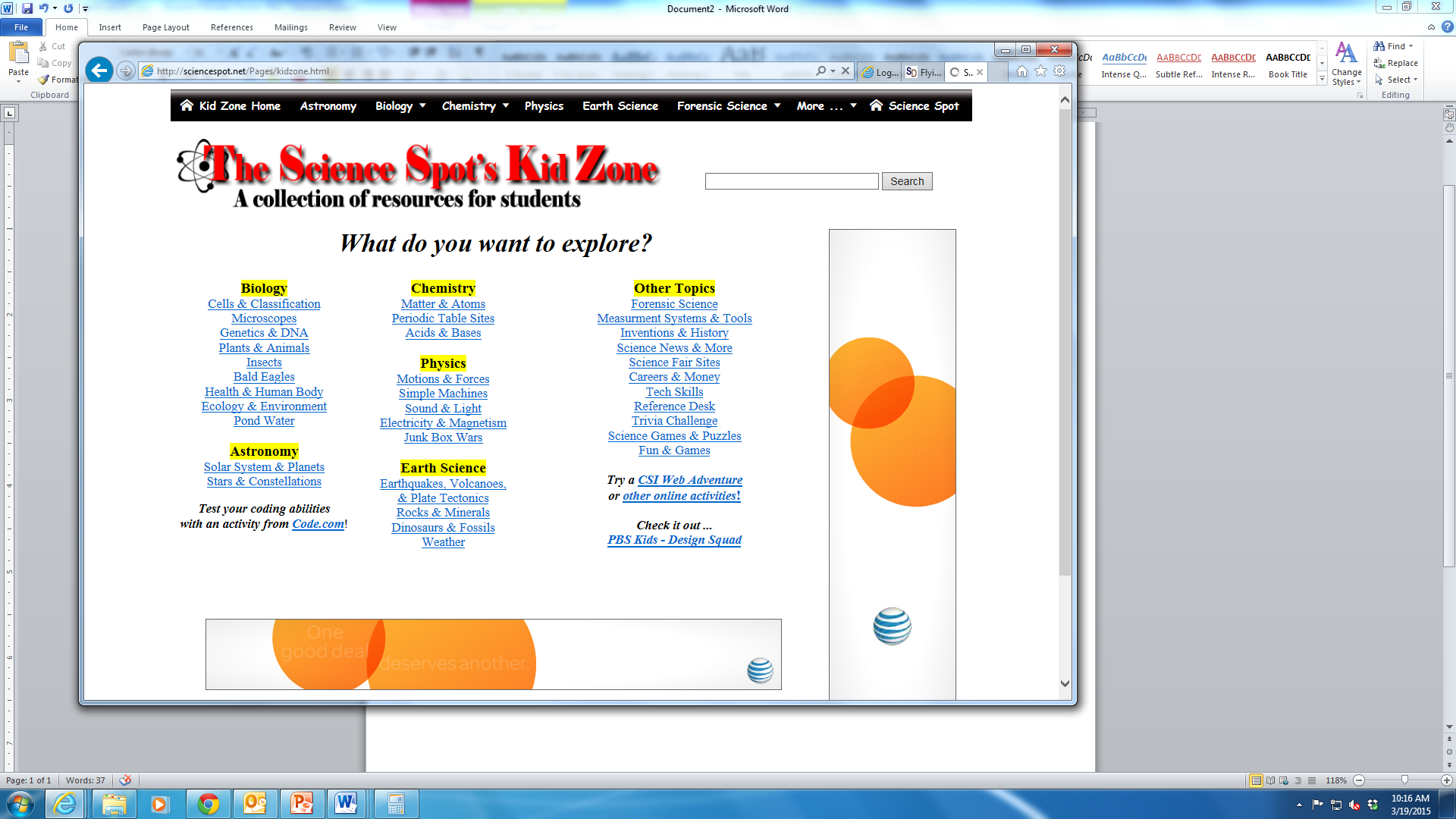
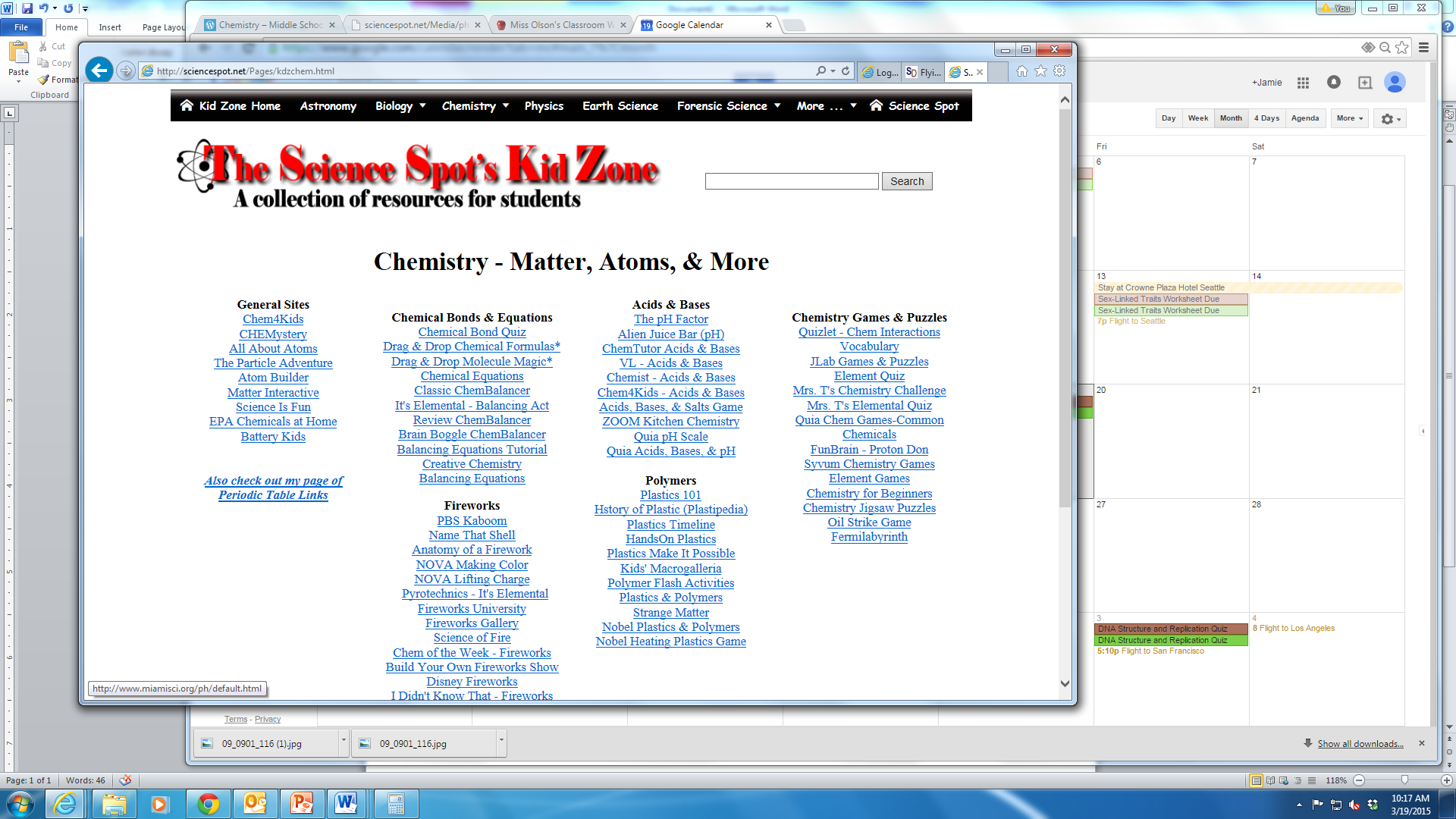
Directions:

1. Log on to a computer
2. Open an internet browser
3. Type in <http://sciencespot.net/> in the URL
4. Close the advertisement
5. Click Kidzone in the upper right

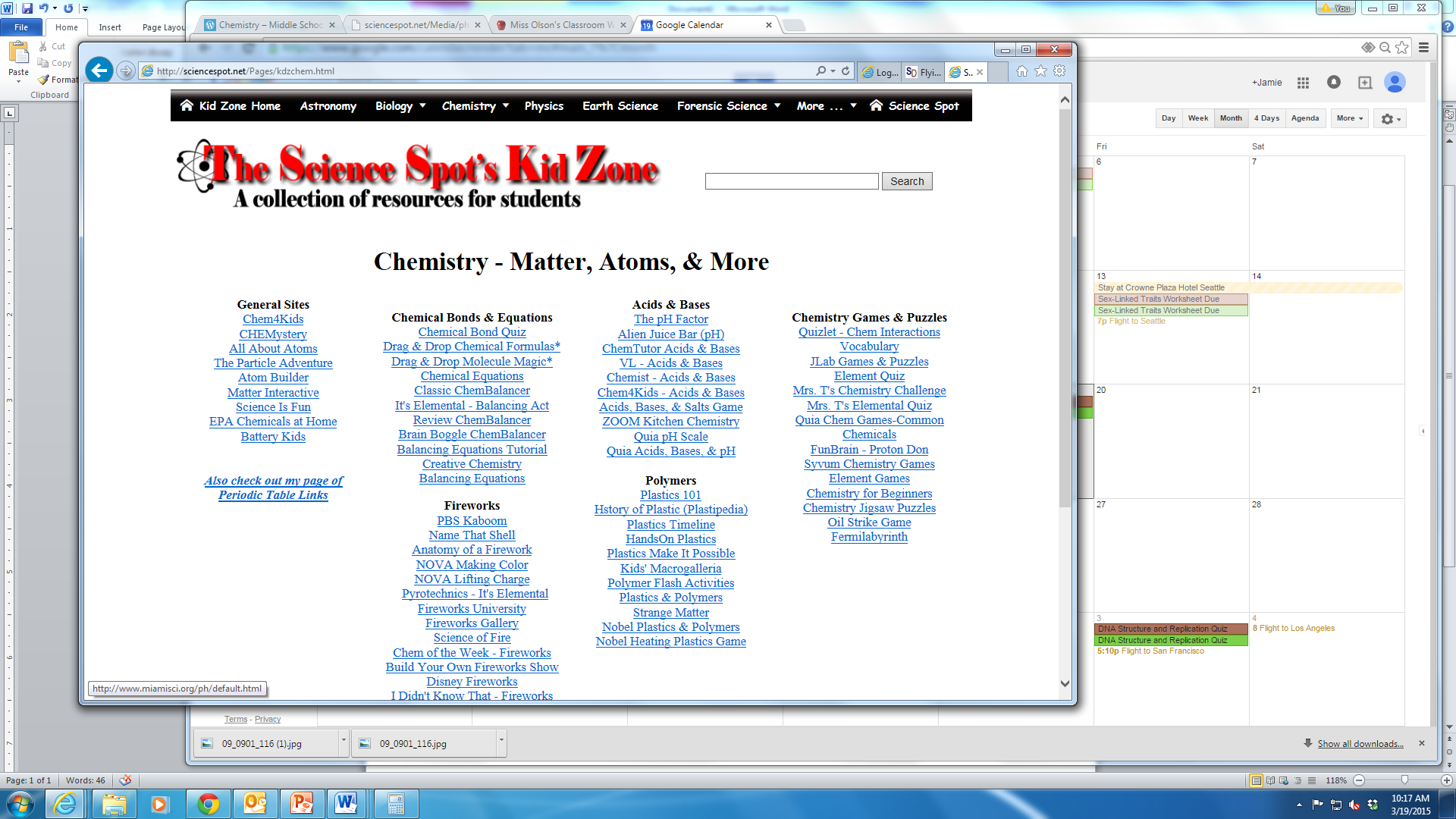


1. Under Chemistry Click “Acids and Bases”



1. Under “Acids and Bases” click the pH Factor
2. Click the “Explore” link at the bottom of the page (not the purple box)
3. Click on the button with the lemon
4. Record the information in the chart below.
5. Click on the other buttons and record the information.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Substance | pH | Acid/Base/Neutral? | Color or pH paper | Color of Cabbage Water |
| Lemon |  |  |  |  |
| Baking Soda |  |  |  |  |
| Aspirin |  |  |  |  |
| Ammonia |  |  |  |  |
| Milk of Magnesia |  |  |  |  |
| Lava Soap |  |  |  |  |
| Borax |  |  |  |  |
| Water |  |  |  |  |
| Lemon Soap |  |  |  |  |
| Vinegar |  |  |  |  |
| Tonic Water |  |  |  |  |
| Liquid Plumber |  |  |  |  |

1. Go back to the main chemistry page
2. Click on “Alien Juice Bar”
3. Click on **Challenge 1**
4. Click the cup with the purple juice in it
5. Drag the cup to the different liquids to check the pH

**What happens to the color in each one?**

Lemon Juice-\_\_\_\_\_\_\_ Window Cleaner- \_\_\_\_\_\_\_\_ Water- \_\_\_\_\_\_

1. Decide which ones you think are an acid, base, or neutral
2. Drag each liquid to a shelf at the top of the page
3. Click the check me lever in the bottom right

Make a Key for the cabbage juice indicator below

Acids turn- \_\_\_\_\_\_\_

Neutrals turn- \_\_\_\_\_\_

Bases turn-\_\_\_\_\_\_\_

1. Click “test more”
2. Fill in the chart below

|  |  |  |
| --- | --- | --- |
| Substance | Color | Acid/Base/Neutral? |
| Distilled Water |  |  |
| Coffee |  |  |
| Mouthwash |  |  |
| Cough Med |  |  |
| Liquid Soap |  |  |
| Orange Juice |  |  |
| Toothpaste Juice |  |  |
| Soda |  |  |
| Tea |  |  |

1. Drag each liquid to the shelves at the top of the page
2. Click the check me button
3. Click back to the main Alien Juice Bar Page
4. Click **Challenge 2**
5. Read the directions before clicking start, summarize the directions: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Complete the activity and fill in the chart

|  |  |  |  |
| --- | --- | --- | --- |
| Customer | What drink they asked for | What you gave them | Were they healthy, sick, or dead? |
| 1 |  |  |  |
| 2 |  |  |  |
| 3 |  |  |  |
| 4 |  |  |  |
| 5 |  |  |  |
| 6 |  |  |  |

1. Go back to the main Alien Juice Bar page
2. Click on **Challenge 3**
3. Click and drag the cup of cabbage juice to each of the liquids
4. You need to mix liquids to create the correct pH
5. Keep adding acids/bases until you get the correct pH
6. Circle the correct answer below.

To make an acid more basic you would add a(n): acid or base?

To make a base more acidic you would add a(n): acid or base?

To make a neutral substance more acidic you would add a(n): acid or base?

To make a neutral substance more basic you would add a(n): acid or base?

1. Close all windows and log off the computer
2. Go back to your desk and bring this paper with you