

Alien Juice Bar Webquest

Name _____

Period _____ Date _____

Go to the following website and answer the questions about the 3 challenges:

<http://sv.berkeley.edu/showcase/flash/juicebar.html>

Challenge 1- *click on it*

1. Cabbage juice acts much like pH paper, because it will change color when it contacts acids and bases. Cabbage juice is purple. Click "Start," you must put the cabbage juice in all 3 liquids. What color does the cabbage juice change to in...
 - a. The water? _____
 - b. The lemon juice? _____
 - c. The window cleaner? _____

2. Now try to figure out which color means neutral, acid, or base by dragging the liquids to those labels. Click "check me" to see if you are correct. Once you are, write down which color does cabbage water turn in ...
 - a. An acid? _____
 - b. A base? _____
 - c. A neutral solution? _____

3. Now, click "Try More" and write down whether each of the following are neutral, an acid, or a base (pour cabbage juice in them, then separate them again):
 - a. Distilled water _____
 - b. Coffee _____
 - c. Mouthwash _____
 - d. Cough medicine _____
 - e. Liquid Soap _____
 - f. Orange juice _____
 - g. Toothpaste juice _____
 - h. Soda pop _____
 - i. Tea _____

Challenge 2- *click continue, then main menu, then challenge 2*

1. What is the warning at the bottom of the sign? _____
2. You must pour each alien the type of drink that they request by dragging it to the cup. (Try not to kill anyone!!). When you finish, click continue.
 - a. What is flying cabbage voted? _____

Challenge 3- *click main menu, then challenge 3*

1. Move the mouse over the green “What is pH?” button to answer the following:
 - a. What pH is acidic? _____
 - b. What pH is basic? _____
 - c. What pH is neutral FOR THE PURPOSES OF THIS ACTIVITY? _____
2. In this challenge, first, pour cabbage juice into all of the drinks to reveal the pH. Then, change the pH to what the alien tells you to (acidic, basic, or neutral) by adding other juices to them. Once you finish each tray, write down what the alien says
 - a. What does the first alien say when you make all the drinks acidic?

 - b. What does the second alien say when you make all the drinks basic?

 - c. What does the third alien say when you make all the drinks neutral?

3. How do you change an acidic drink to neutral? _____
4. How do you change a basic drink to neutral? _____
5. How do you change a neutral drink to acidic? _____
6. How do you change a acidic drink to basic? _____