

Postlab Questions

A- Questions 3.A

1/ Which carbohydrate solution contains reducing sugar?

2/ What functional group present in this carbohydrate molecule produces a positive reaction with the Benedict's reagent?

3/ If onion juice mixed with Benedict's reagent gives a mustard yellow color, in what form is sugar stored in onions?

B- Questions 3.B

1/ Do you see a blue-black color in any of the carbohydrates solutions other than the starch?

2/ Does the iodine test help you distinguish starch from sucrose? Why or why not?

3/ Starch and cellulose are both polymers of glucose molecules, but starch gives a positive test and cellulose does not. What is a plausible explanation for this difference?

4/ Did you see small dark bodies within the potato cells? If you did not, review your slide and, if need be, contact your instructor for assistance.

5/ What molecule is obviously contained in these dark bodies?

6/ If you mix potato juice with the Benedict's reagent in the previous experiment, would a color change occur? Why or why not?

C- Question 3.C

1/ Which solution(s) contain(s) protein?

2/ What type of chemical bond causes the biuret reagent to react and to give the characteristic violet color?

3/ Would you expect a solution containing an enzyme to yield a positive biuret test? Why or why not?

4/ What color change would occur if iodine was added to the egg white?

D- Question 3.E

1/ Which compound(s) contain(s) lipids?

2/ Which tube served as the control?

3/ Which compound contains more calories, honey or corn oil? Why?
