**Activity 24: Reducing Sugars**

***Learning Objectives***

*Identify reducing sugars based on carbohydrate structure*

**Estimated Completion Time** 20 Minutes

**Instructor Information**

Prior to this activity, the structure of polysaccharides should be reviewed. Cellulose and starch appear in the skill development.

**ANSWERS TO QUESTIONS**

1. C1 gains an oxygen. Oxidation.

2. Cu2+ goes to Cu1+, so it gained an electron. Reduction.

3. Anomeric carbons are the C1s on glucose and lactose. The anomeric carbon on fructose is C2. Sucrose has two anomeric carbons: C1 on the glucose unit and C2 on the fructose unit.

4. They are all reducing except for sucrose, which has both anomeric carbons bonded.

**Activity 24: Skill Development**

1. a. Yes b. Yes c. Yes d. Yes e. No f. No