

Chapter 8: Sugar



FoodMASTER

Food, Math, and Science Teaching Enhancement Resource
Supported by NIH Science Education Partnership Award (SEPA)





Food Explorations Lab I: Sweet Saccharide

Teacher Preparation – Before Starting Lesson



Color the sugar water yellow using food coloring.

Student Lab Investigations



3 Unknown Samples

Student Lab Investigations



Glucose concentration of the control is 0.

Student Lab Investigations



Glucose concentration of Sample A (apple juice) at 30 seconds.

Student Lab Investigations

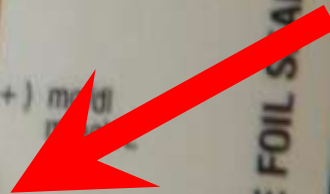
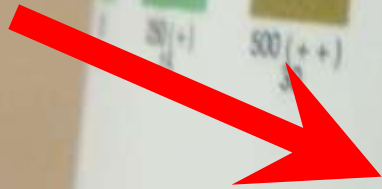


Glucose concentration of Sample B (grape juice) at 30 seconds.

Student Lab Investigations

Apple Juice

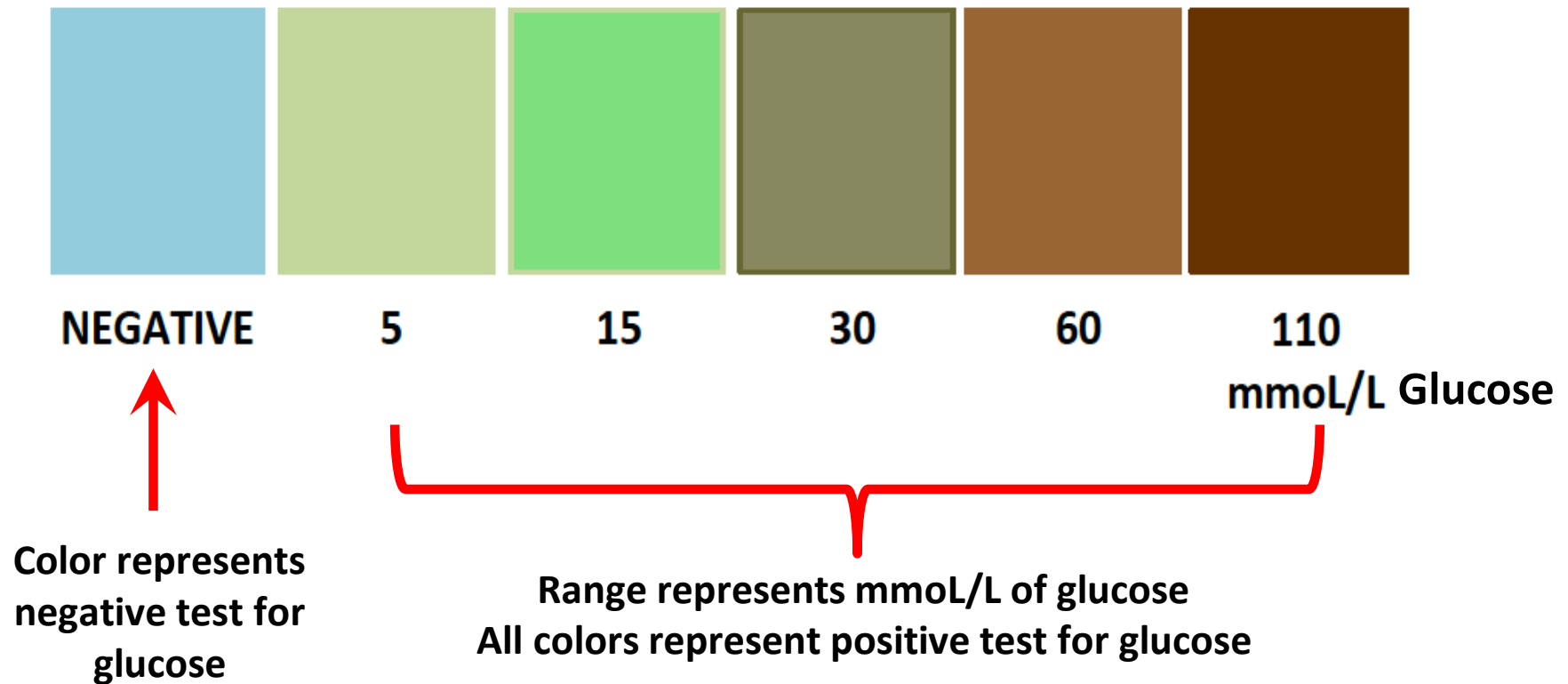
Grape Juice



Glucose concentration comparison past 30 seconds (strips will continue to brown).
Apple juice has a slightly lower glucose concentration than grape juice.

Student Lab Investigations

Glucose Reference Color Chart





Food Explorations Lab II: Super Solutions

Teacher Demonstration



Create a super-saturated solution.

Student Lab Investigations



Saturated Solution



Natural Juice