SECTION 2: NUTRIENTS IN FOODS

LAB

INTRODUCTION
In this lab students will be experimenting with vegetables to discover which nutrients they contain. You can test foods for fat by rubbing foods on white Xerox paper or brown bags. Foods with fats leave a greasy, translucent mark on the paper. To find which foods have sugar, you place one small food sample in a sandwich bag and add a mixture of 1 part Benedict’s solution to 4 parts water. Place the bag in a cup of very hot water and watch for a color change in the Benedict’s solution. Green, yellow, or red shows the presence of natural sugar. If the solution remains blue there is not sugar. Test foods for starch with iodine. Iodine turns black on the starch.

Nutrients: Chemicals the body need nutrients for growth, repair, and development. For example, water, vitamins, carbohydrates (starch and sugar), fats, proteins, and minerals are all necessary.

Sugar: is the food produced by green plants during photosynthesis. This sugar is used for growth or stored by plants as starch.

Starch: is the stored food in plants.

Carbohydrates: are starches and sugars.

Fat: is stored energy in animals and in some plants (mainly seeds).

ASSESSMENT ANCHORS ADDRESSED
S4.B.1.1 Identify and describe similarities and differences between living things and their life processes.

PURPOSE
Students study nutrition while discovering which nutrients are in the vegetables they eat.

MATERIALS
For the class:
Hotpot with water  Fresh vegetables (broccoli and carrots)*
knife  Cup
Teaspoon  Benedict’s solution
Ziploc sandwich bags  Iodine with dropper
Paper towels  Wax paper
worksheet
Teacher provides items marked with *