SECTION 8: EXCRETION

LAB

Westminster College

INTRODUCTION

In this lesson, students put an egg in vinegar. Vinegar dissolves calcium, so the shell is dissolved. Thus only the cell membrane is left around the egg. The vinegar diffuse through the membrane into the egg, making the egg much larger as the egg fills with vinegar. The egg had a lower concentration of water than the vinegar, so the vinegar entered the egg. This happens when the blood moves by a cell that is full of waste. The blood moves into the cell from a higher concentration of water to the lower concentration of water in the cell.

Kidney: The main organ of the excretion system. It removes wastes from the blood by filtering the blood.

Sweat glands: Glands for the excretion of salts and water (and cooling).

Excretory system: Provides a way for various wastes to be removed from the body. The wastes include water, salts, carbon dioxide, and urea.

ASSESSMENT ANCHORS ADDRESSED

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

PURPOSE

Students will study the role of the kidney in removing cellular wastes from blood and converting it into urine, which is stored in the bladder.

MATERIALS

For the class:

Corn syrup	White vinegar
1 raw egg*	2 pint jars
1 box salt	2 large potatoes*
18 cups with water	

*Teacher provides items marked with **