**Enzyme Catabolism Investigation**

**Objectives:**

* Students will determine which enzyme catalyzes cellulose to produce glucose.
* Students will determine which biomass will produce the greatest amount of glucose.

**Teacher Background:**

Prior knowledge needed to complete this activity

* Cellulose can be broken down by an enzyme to produce glucose.
* Enzymes are substrate specific.
* Different types of plants produce varying amounts of glucose when their cell walls are broken down by enzyme.

**Student Directions:**

Given the following enzymes, select a biomass (corn, soybeans, or sorghum) and determine which enzyme indicates a positive test for the presence of glucose.

**Materials:**

Amylase corn stalk

Amylase +Glucoamylase soybean stalk

Catalase sorghum

Beano

Lactaid

**Create a table below to show if a positive or negative test for the presence of glucose.**