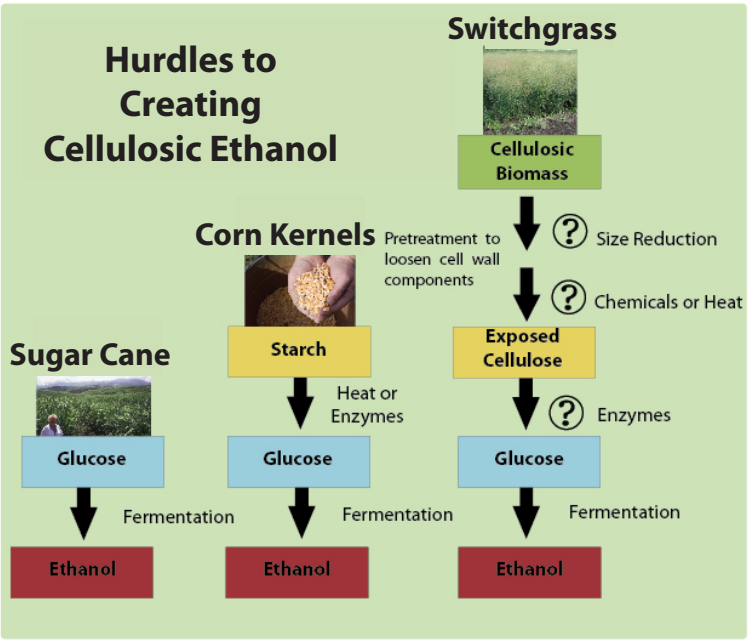
Directions: Print double sided and cut along the light blue line.

'Fermentation In A Bag' Experiment



GREAT LAKES BIOENERGY RESEARCH CENTER

This experiment allows students to observe the process of fermentation and the challenge of producing ethanol from cellulosic sources. Students combine yeast and warm water with a feedstock (such as sugar, corn grain, or sawdust) in a resealable zipper bag and observe as the yeast "eats" the feedstock, and produces carbon dioxide and ethanol. Younger students can observe fermentation in a single bag, while older students can create multiple set-ups to compare different feedstocks and treatments.

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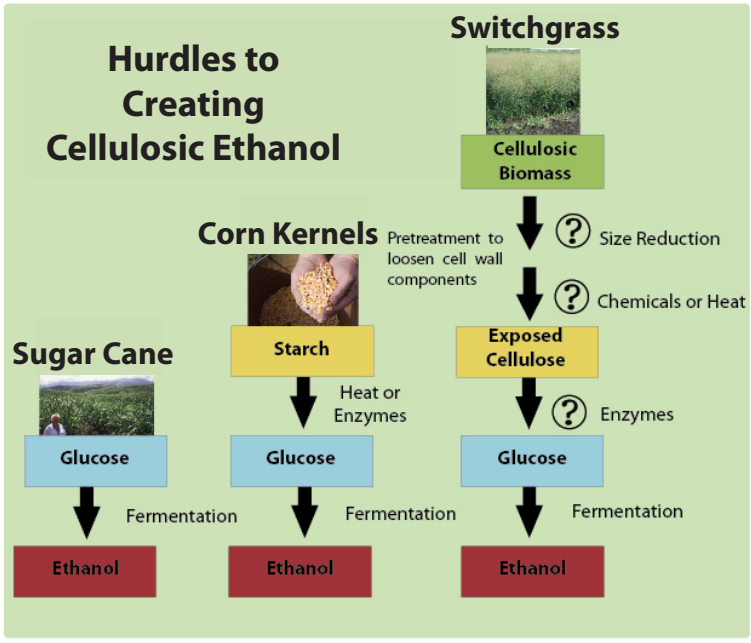

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- Are you observing fermentation? How do you know?
- How did the yeast respond to different kinds of "food"? Why do you think there is a difference?
- If sugar is yeast's favorite "food", why might we want to use cellulosic plant materials instead of sugar for making ethanol?

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