ENZYMES

- enzymes are a type of protein
- speed up chemical reactions

Oct 25-8:40 AM

In every chemical reaction

$C_6H_{12}O_6 + 6O_2 \rightarrow 6H_2O + 6CO_2 + ATP$

reactants (substrates) products

Oct 25-8:45 AM

Lock + Key Analogy

- active site is shaped specifically for only certain substrates
- enzymes are used over and over again

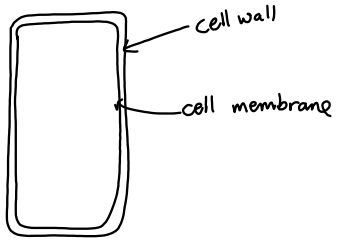
Oct 25-8:51 AM

STARTING HERE, USE THIS AS A SOURCE

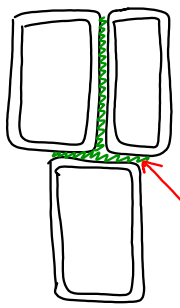
Cellulase Pectinase

both work in plant cells

Oct 25-8:55 AM



Oct 25-8:58 AM



Cell walls are made primarily of cellulose

between the cells is a glue-like substance called pectin

Oct 25-8:59 AM

Cellulase breaks down cellulose
(enzyme)

Pectinase breaks down pectin
(enzyme)

Oct 25-9:01 AM

Which of these enzymes will produce apple juice quicker?

Oct 25-9:07 AM

Capozzi, D. (2016). *Cellulase and Pectinase*. Class Notes, October 25, 2016.

Oct 25-9:09 AM