

Bio 9.1

Goals

- * Describe the interaction between photosynthesis and cellular respiration
- * Describe the function of the light dependent and light independent reactions

Plan

Where does sugar come from? Where does carbon go when we exhale it? (5 min)

Video: The simple story of photosynthesis and food - Amanda Ooten, TED-Ed (5 min)

The story of photosynthesis, overview (10 min)

Video: Photosynthesis: Crash Course Biology #8 (15 min)

Recap and questions (5 min)

Video: Photosynthesis amoeba sisters (10 min)

Worksheet (30 min)

Bio 9.3

Goals

- * Describe chromatography in several contexts and media
- * Use paper chromatography to separate ink and chlorophyll

Plan

Describe Nobel Prize in Chemistry

Video:

How do we identify the chemicals in a cell?

Melvin Calvin and the chromatography experiment

Core of chromatography (10 min)

Video: Chromatographic Separation Explained

Lab intro (10 min)

Lab: Chlorophyll chromatography (40 min)

Discussion: When would you want to separate and identify compounds in science?