



# CELL ENERGY PROJECT

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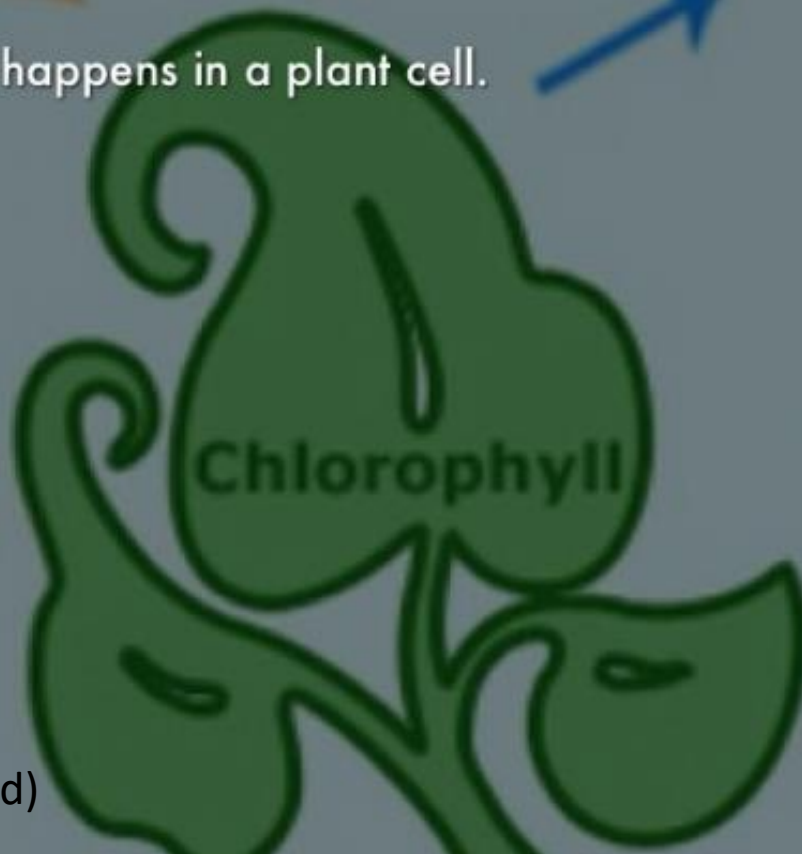
# PHOTOSYNTHESIS

CC S C Ascher Sammie K (adapted)

# PHOTOSYNTHESIS

- Is the process by which a cell captures energy in sunlight and uses it to make food.
- It occurs in the chloroplast.
- The process happens in a plant cell.

**Carbon  
Dioxide**



**Oxygen  
is released**



**Glucose  
is formed**





# REACTANS

- Light energy
- Carbon dioxide
- And water



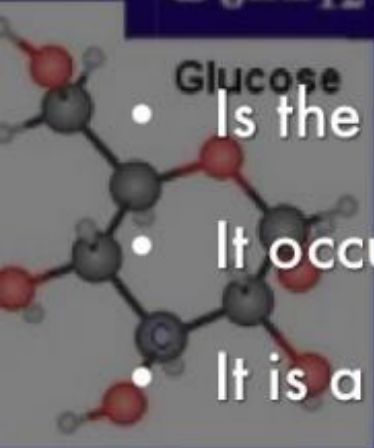
# PRODUCTS

- Glucose
- And oxygen

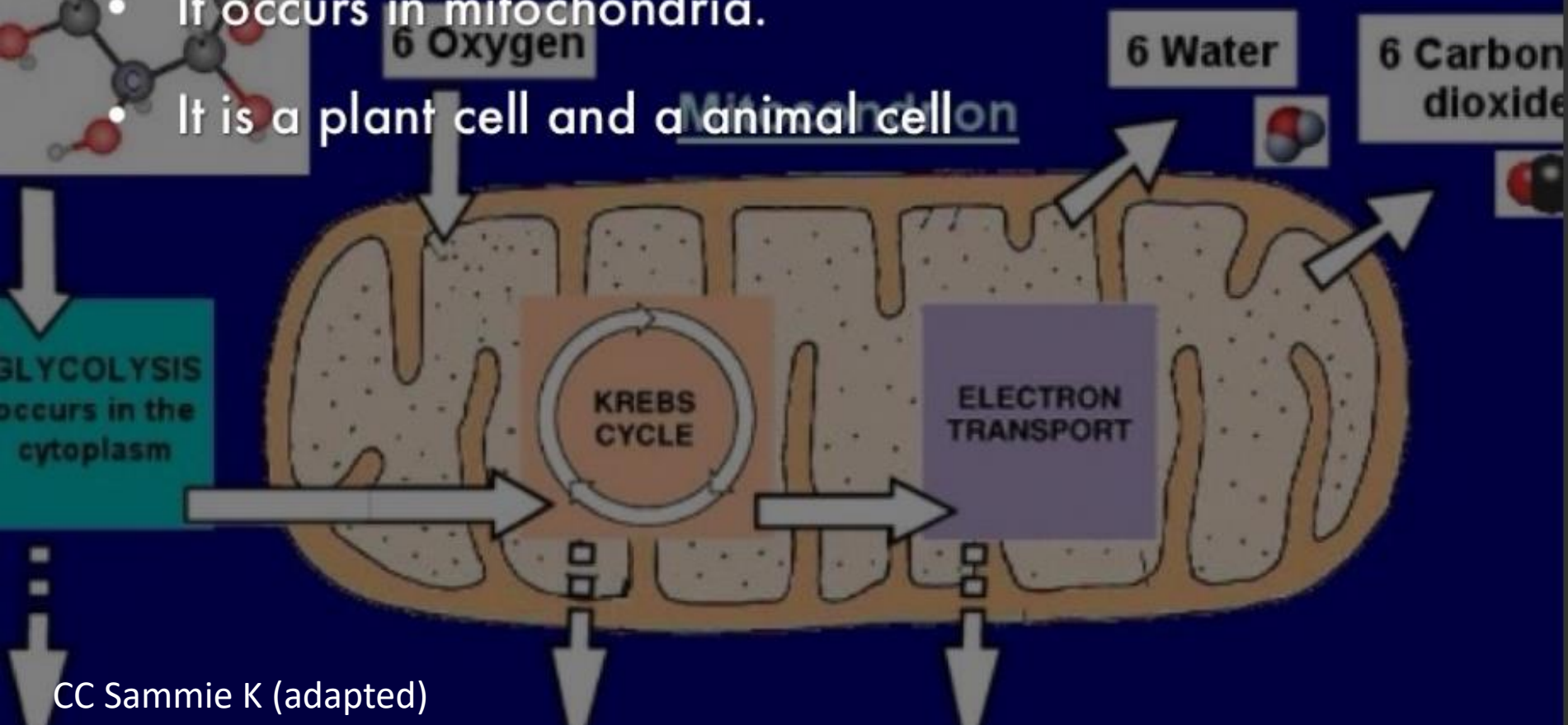


# CELLULAR RESPIRATION

# Cellular Respiration



- Is the process by which cells obtain energy from glucose.
- It occurs in mitochondria.
- It is a plant cell and an animal cell





# REACTANTS

- Glucose
- Oxygen





# PRODUCTS

- Carbon dioxide
- Energy
- And water

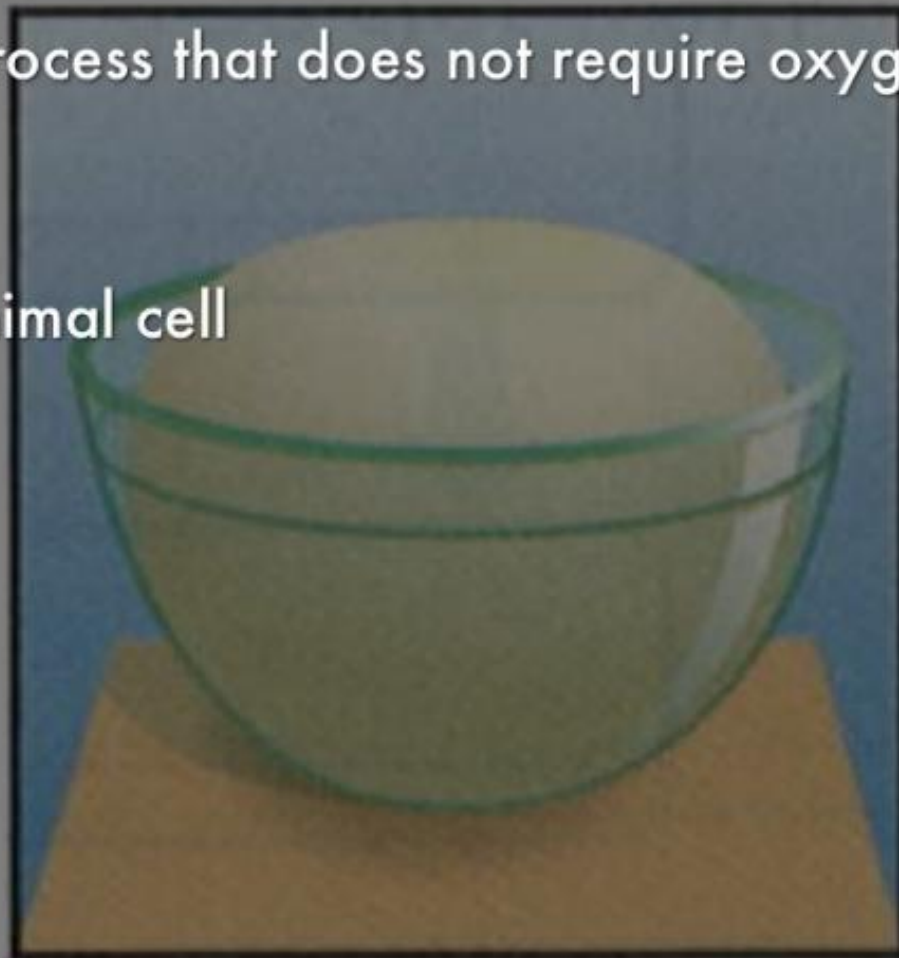
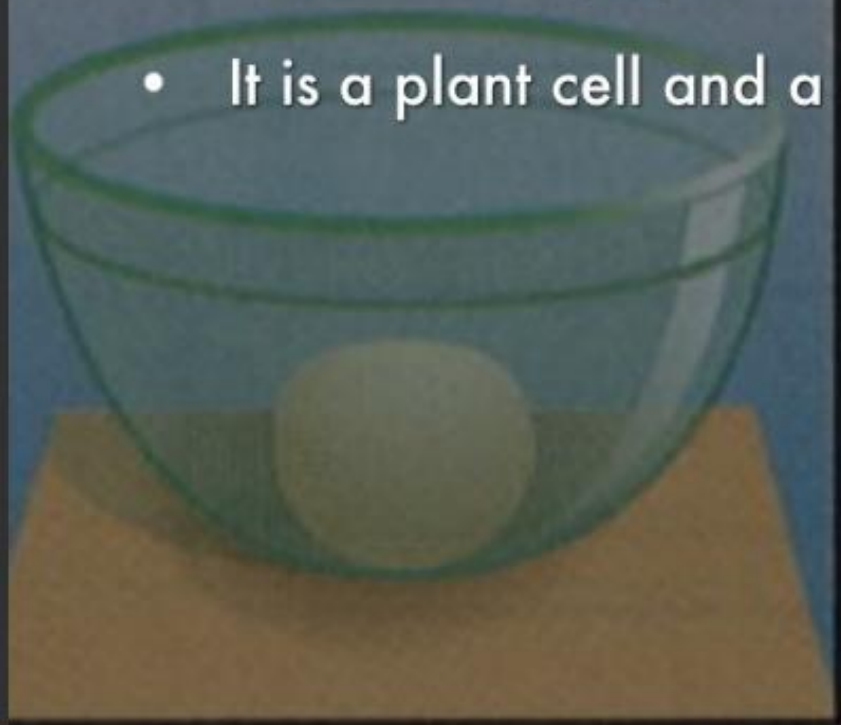


# FERMENTATION

CC Mouin M Away Sammie K (adapted)

# FERMENTATION

- Is an energy releasing process that does not require oxygen
- It occurs in cytoplasm
- It is a plant cell and a animal cell





# REACTANTS

- Glucose



# PRODUCTS

- Energy
- Lactic acid
- Or alcohol



# SIMILARITIES THEY ALL HAVE

A microscopic view of numerous red blood cells, appearing as bright red, biconcave discs against a darker red background. The cells are scattered across the frame, with some in sharp focus and others blurred in the background.

**THEY ARE ALL IN CELLS**

A large, vibrant fire with bright orange and yellow flames rising from a pile of burning logs. The fire is the central focus, set against a dark background. The flames are dynamic and energetic, with some sparks visible at the top.

# THEY ALL USE ENERGY



erin

Oxyluc



# THEY ALL MAKE ATP

erage



Luciferase  
+  
AMP



Lucife

PP<sub>1</sub>

CO<sub>2</sub>



# DIFFERENCES THEY ALL HAVE



# **PHOTOSYNTHESIS: CAPTURES ENERGY FROM SUNLIGHT**

A ball-and-stick model of a glucose molecule (C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>). The model shows a complex, branched structure of atoms. Carbon atoms are represented by grey spheres, hydrogen atoms by white spheres, and oxygen atoms by red spheres. The atoms are connected by bonds, forming a three-dimensional structure. A semi-transparent grey horizontal bar is overlaid across the middle of the molecule, containing the text "CELLULAR RESPIRATION: GETS ENERGY FROM GLUCOSE".

**CELLULAR RESPIRATION: GETS ENERGY FROM GLUCOSE**



**FERMENTATION: DOES NOT REQUIRE OXYGEN**



Photosynthesis and cellular respiration work together by forming a cycle that keeps the levels of oxygen and carbon dioxide fairly constant in earth's atmosphere.