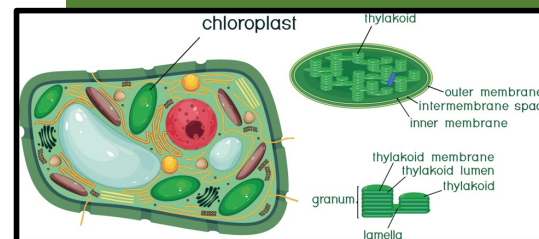
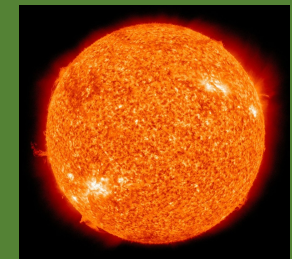
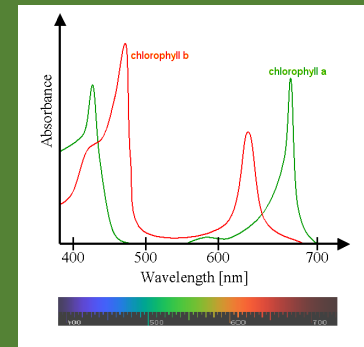
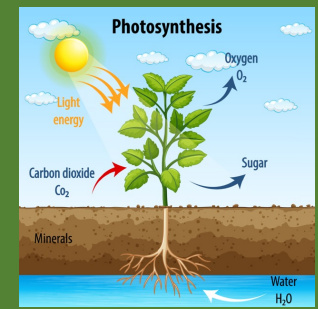


Photosynthesis

- Earth's Energy Budget
- Photosynthesis Introduction
- Pigments
- Why Plants are Green
- Light
- Chlorophyll a & b
- Carotenoids
- Why Some Leaves Change Color in the Fall
- Photosynthesis and Life



Preview File

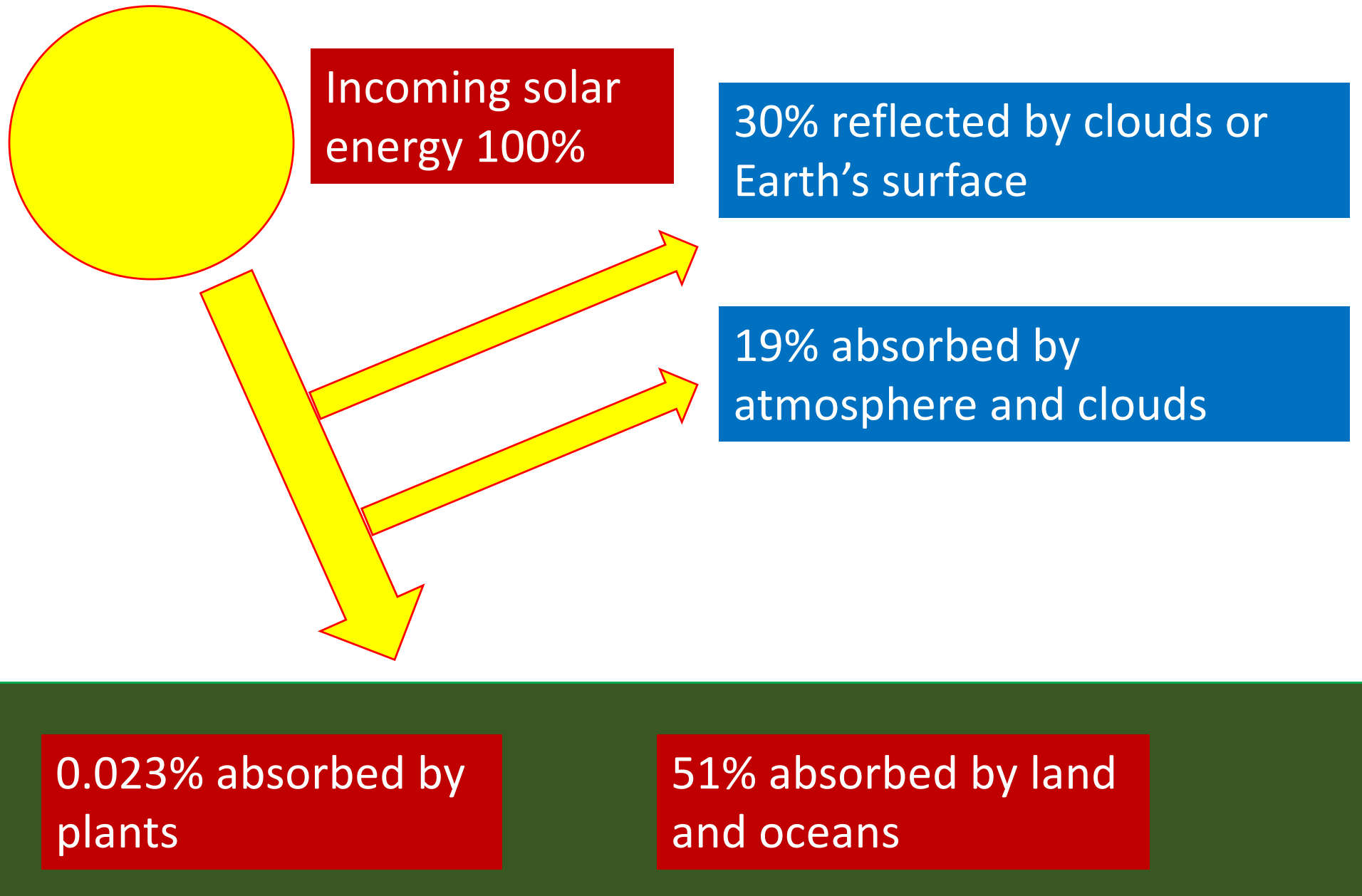
Please enjoy this preview of your Student Version of the presentation. Please note within this sample file:

- Some slides appear blank because they have been removed
- Student versions have portions of the text removed which is given in the teacher version and appear as _____ which the students are to fill in
- Other slides may have on them, this represents writing that has been removed on this sample

**The paid full version of your resource includes
both Google Slides and PowerPoint and is
Google Classroom Ready**



Earth's Energy Budget

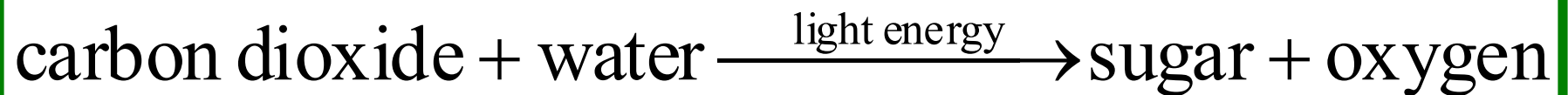
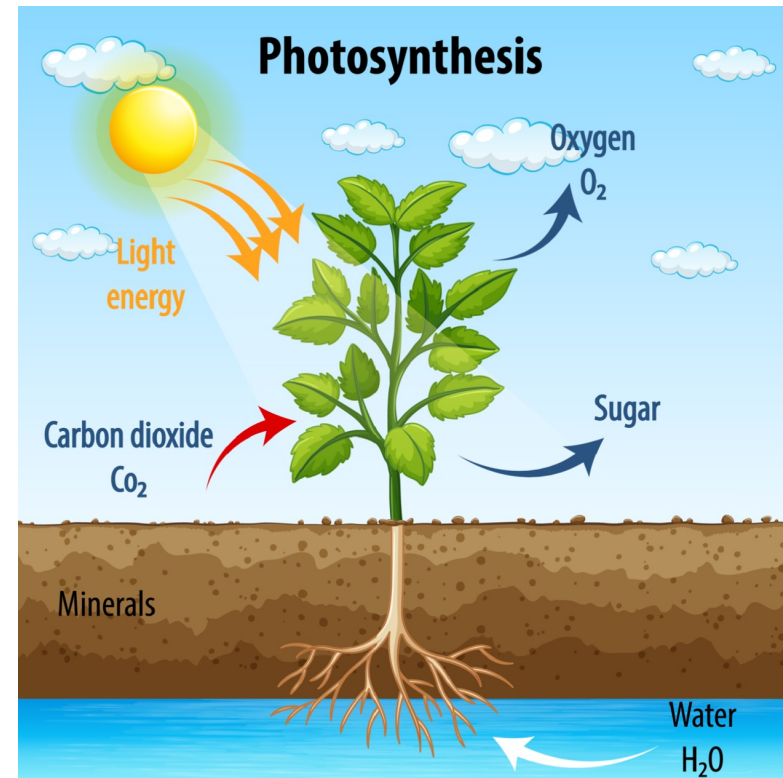


**THIS SLIDE HAS BEEN
REMOVED**

Photosynthesis



- _____
- Occurs in the leaves of plants in organelles called chloroplasts



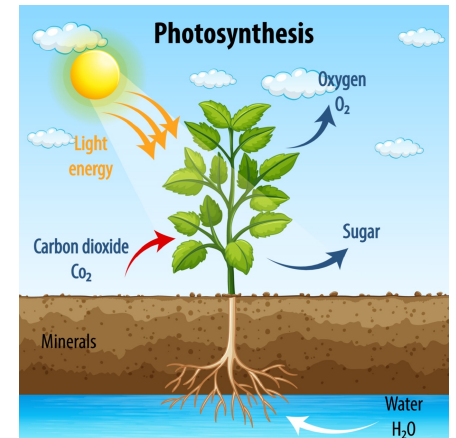
Photosynthesis

Why?

How?

Who?

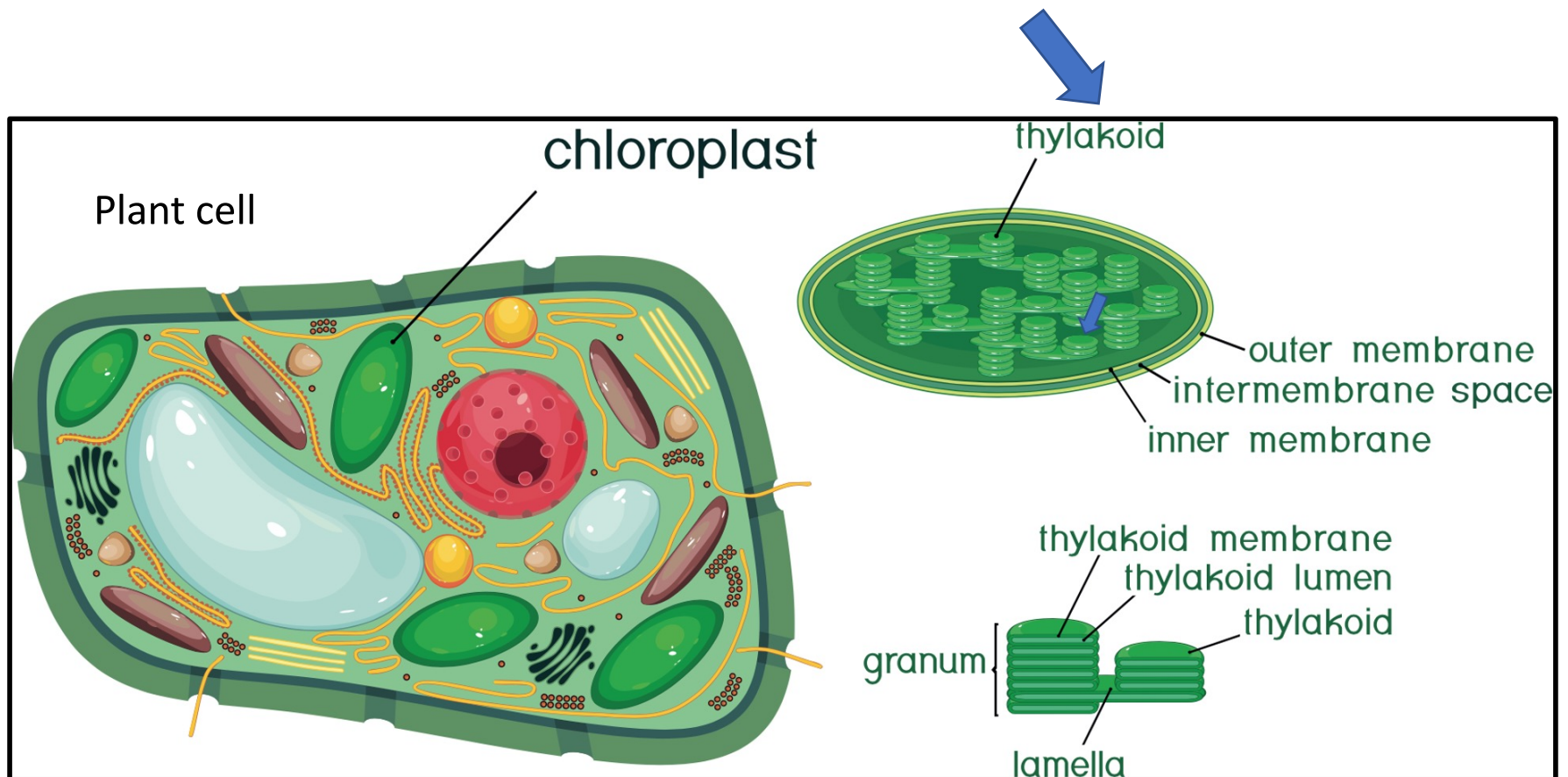
Any organism which contains chlorophyll (plants, cyanobacteria, algae, etc.)



Photosynthesis

- Occurs in the chloroplast of plant cells

- _____



Pigments

- Pigments are substances made by living things that absorb certain colors of visible light
- Chlorophyll is the most important pigment for photosynthesis in plants
- However, other pigments are also present in the leaf
 - _____
 - _____

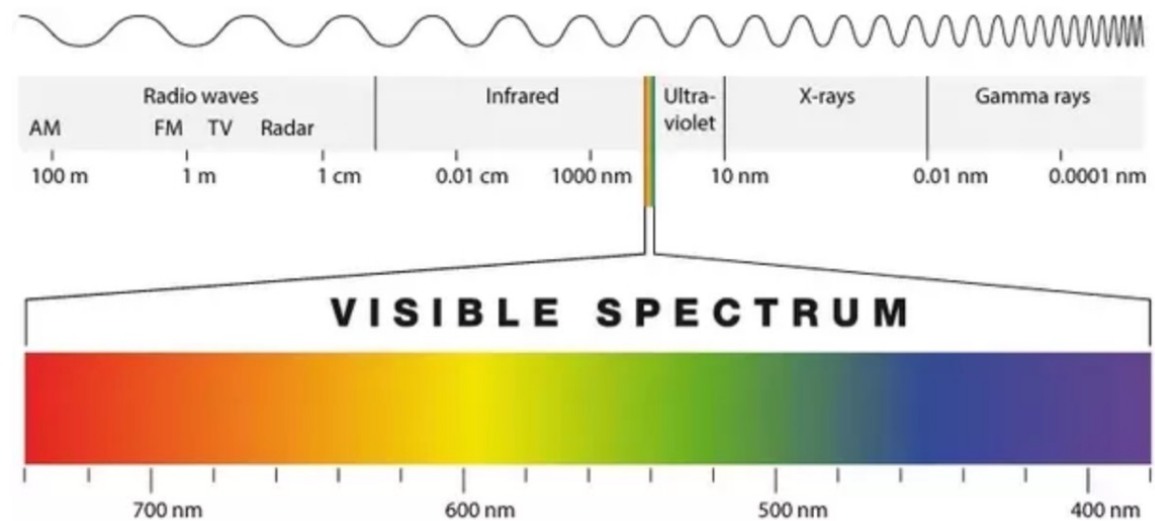


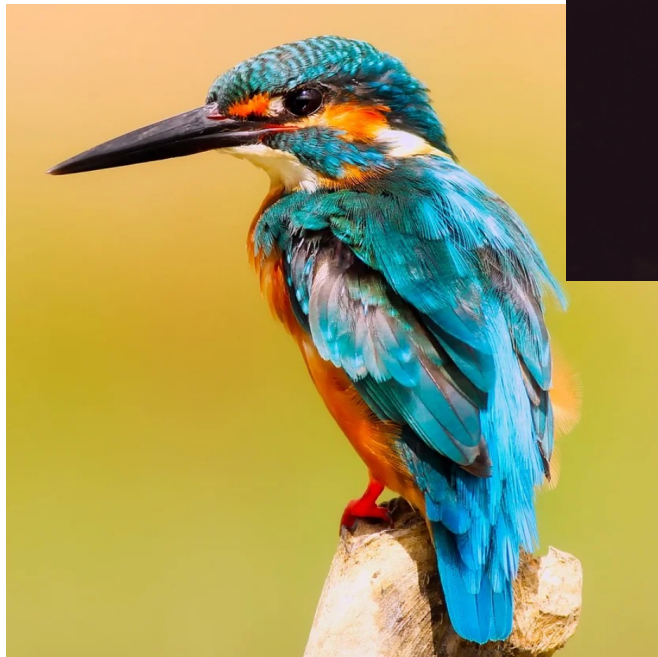
Why are Most Plants Green?

THIS SLIDE HAS BEEN REMOVED

Light Review

- _____
- Different substances absorb different colors depending on the structure
- Colors that the substance doesn't absorb, it reflects
- We see that reflection as the object's color
 - I.e. Green plants





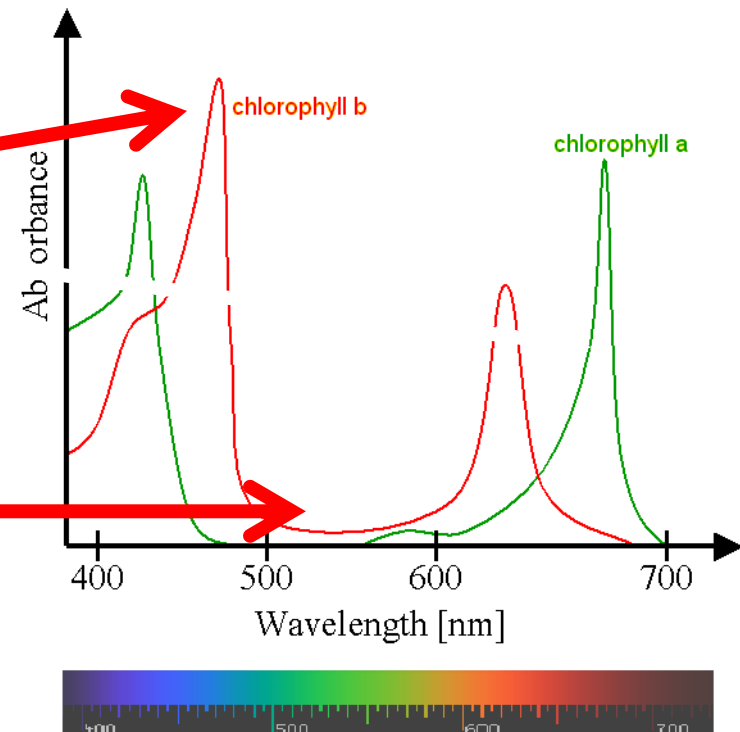
Chlorophyll a & b

- Chlorophyll a and b are pigments found in many plants that absorb blue and red light but reflect green

- _____

**High
absorption/low
reflection**

**Low
absorption/high
reflection**



**THIS SLIDE HAS BEEN
REMOVED**

Why do some leaves turn colors in the fall?

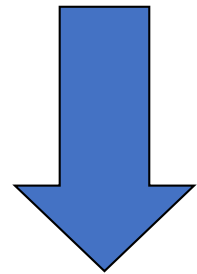
- There are three main pigments in plants; Chlorophyll (reflect green), Carotenoids (reflect orange/red), and Xanthophylls (reflect yellow/brown)
 - The most common pigment,
-



Why do some leaves turn colors in the fall?

- During winter, there is not enough light or water for photosynthesis

- _____

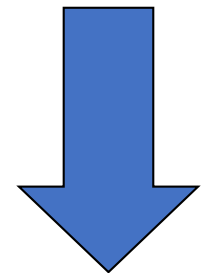


- They begin to shut down their food-making factories



Why do some leaves turn colors in the fall?

- The green chlorophyll pigment disappears from the leaves leaving the other pigments behind
 - As the bright green fades away, we begin to see yellow and orange colors
 - Small amounts of these colors have been in the leaves all along,
-

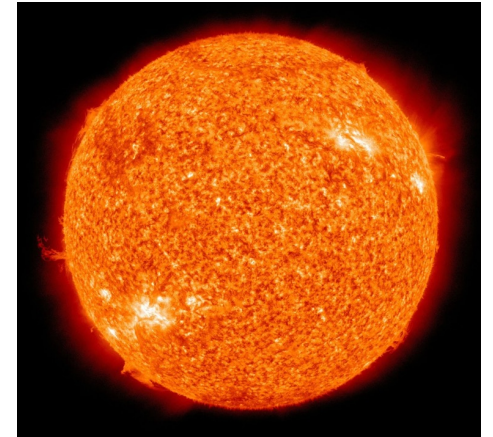


**THIS SLIDE HAS BEEN
REMOVED**

Photosynthesis and Life

- We completely rely on the Sun!

- _____



=

- No Sun = No life on Earth
- This is the basis behind the dinosaur extinction



The Dinosaur Extinction

A HUGE asteroid is thought to have hit Earth near Mexico which sent up so much dust that it blocked the Sun for many years.

- No Sun = No Food = No more dinosaurs

