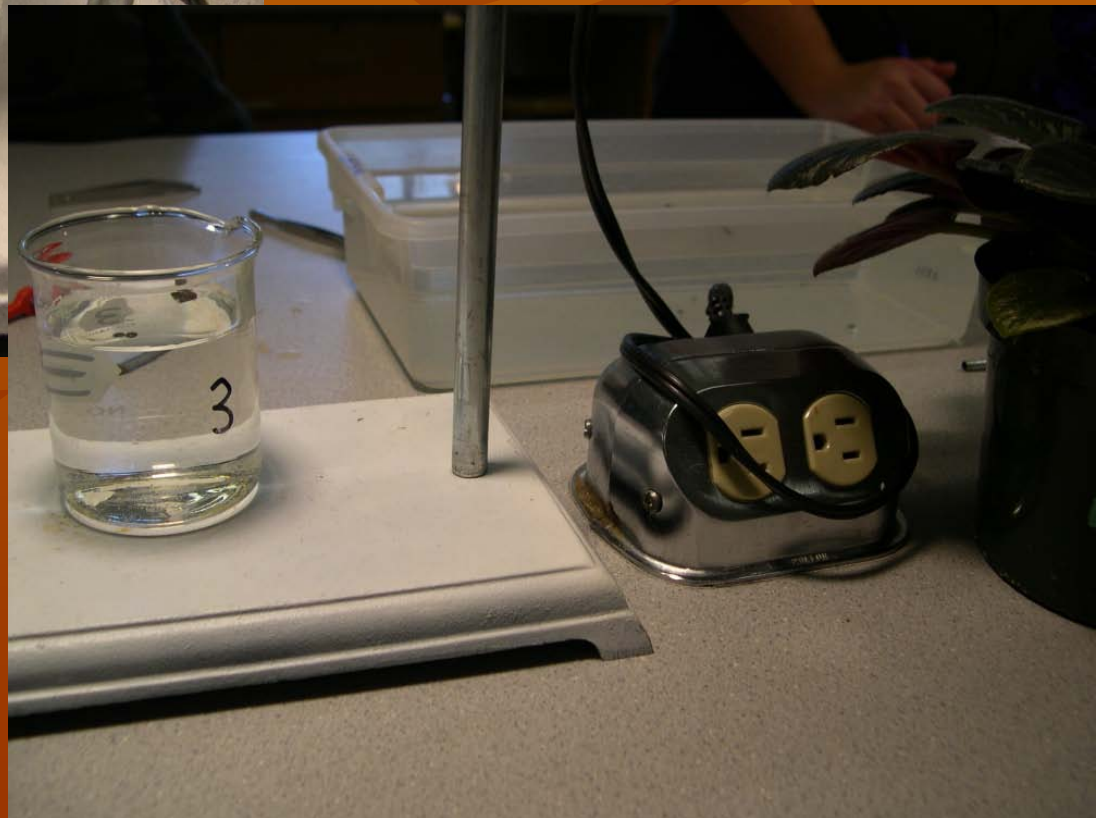


Light intensity or quality and the rate of photosynthesis: Procedure

Photosynthesis



Why did no leaves rise if sodium bicarbonate was not added to the water (beaker #1)?



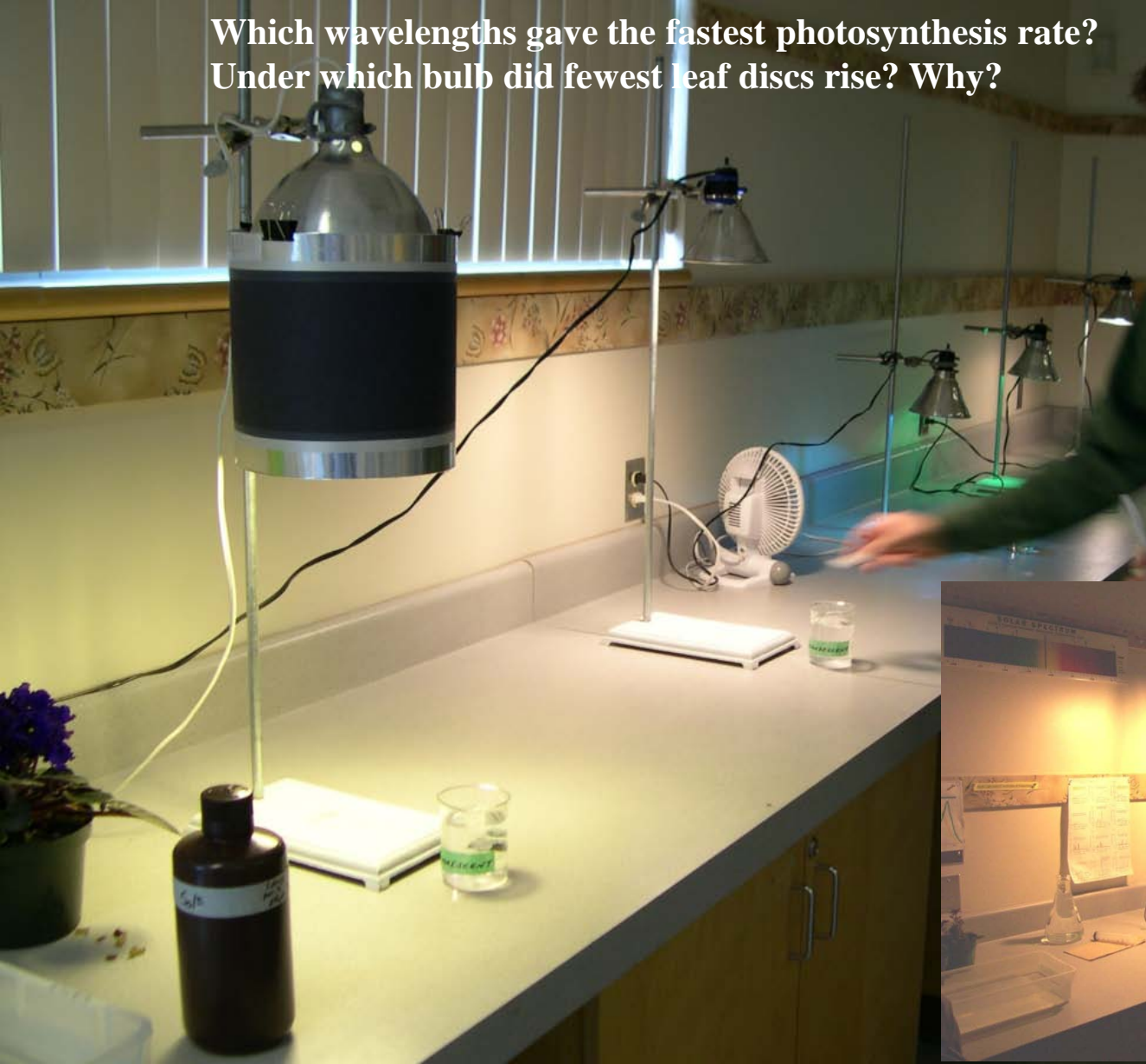
Should the leaf discs rise faster or slower under lower light levels?

Light intensity and the rate of photosynthesis

Photosynthesis

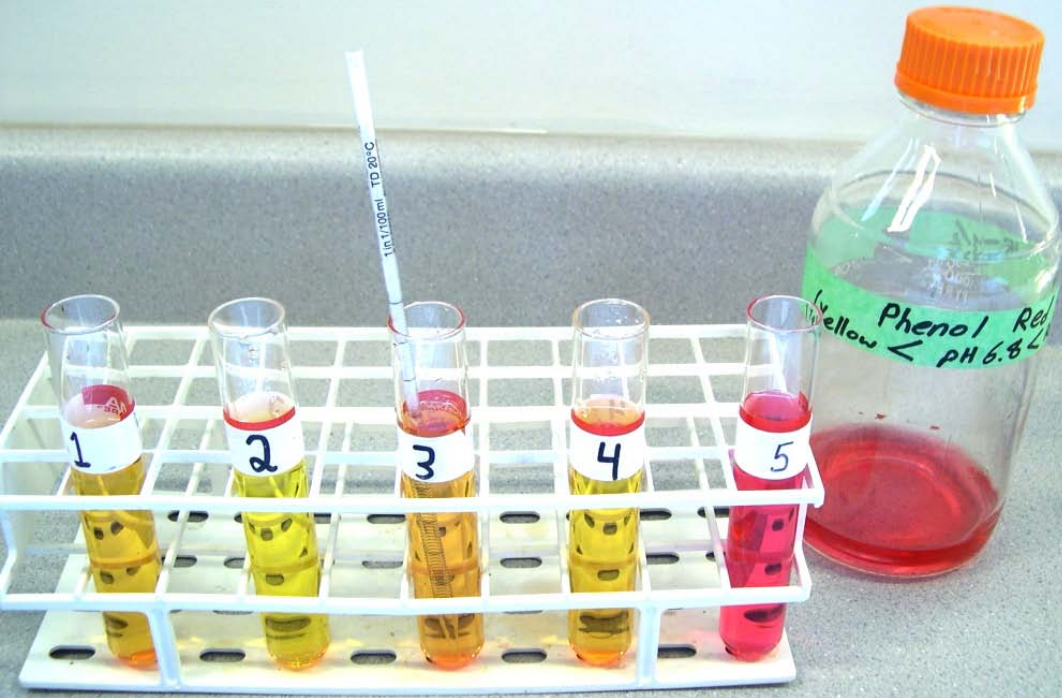
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Which wavelengths gave the fastest photosynthesis rate?
Under which bulb did fewest leaf discs rise? Why?



Light quality and the rate of photosynthesis

Photosynthesis



Air was blown into tubes 1, 2, 3, & 4 making a weak acid and changing the colour of the phenol red to yellow

Why did #1 (live plant) turn back to red while #2 (dark) and #3 (dead plant) did not?



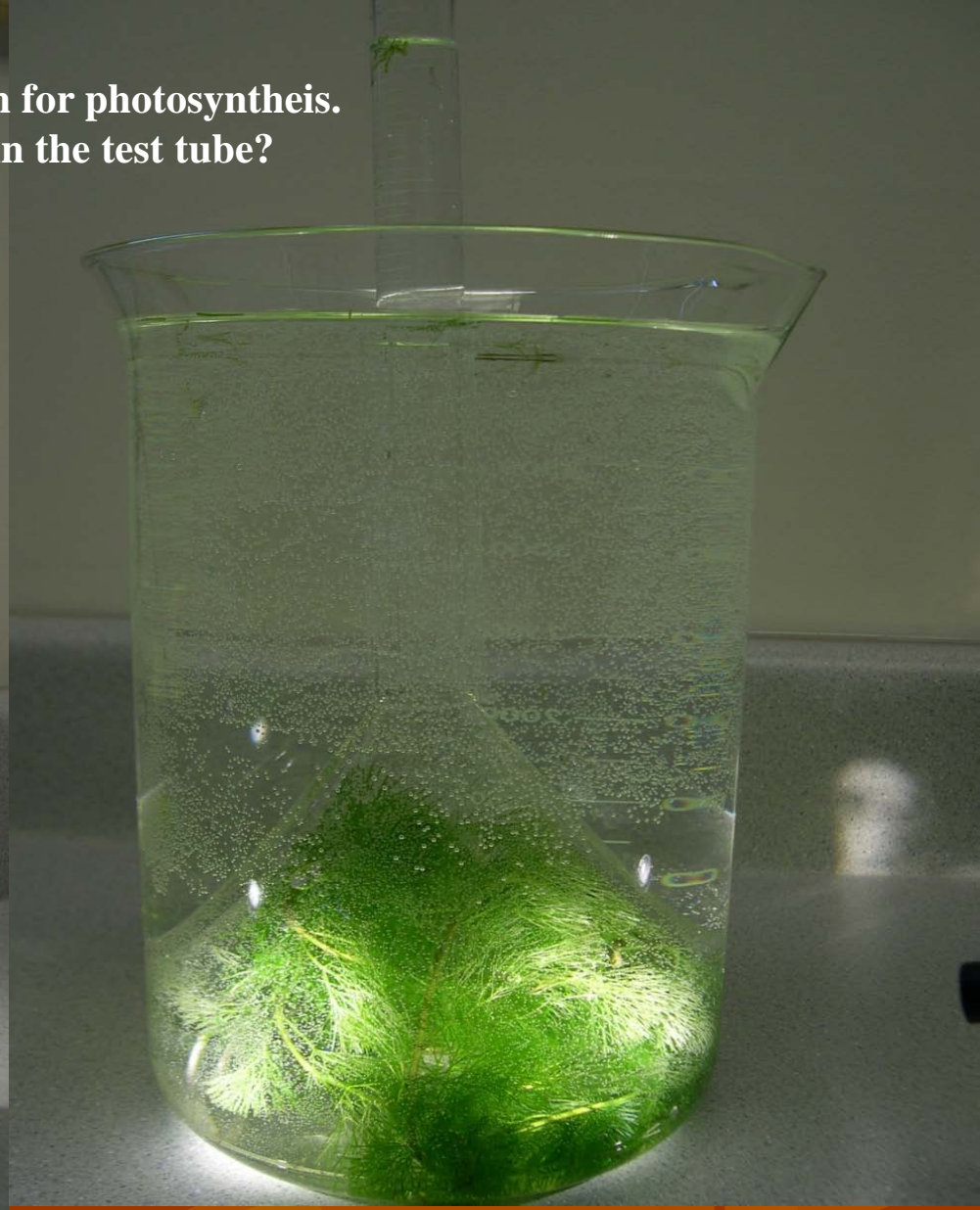
Demo. #1: chloroplasts absorb carbon dioxide (CO₂)

Photosynthesis

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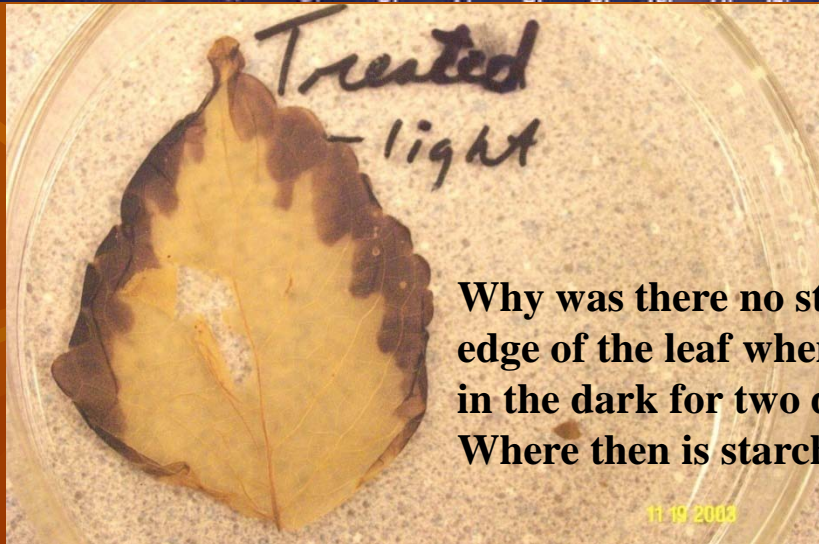
Write the summary equation for photosynthesis.
Which gas is accumulating in the test tube?



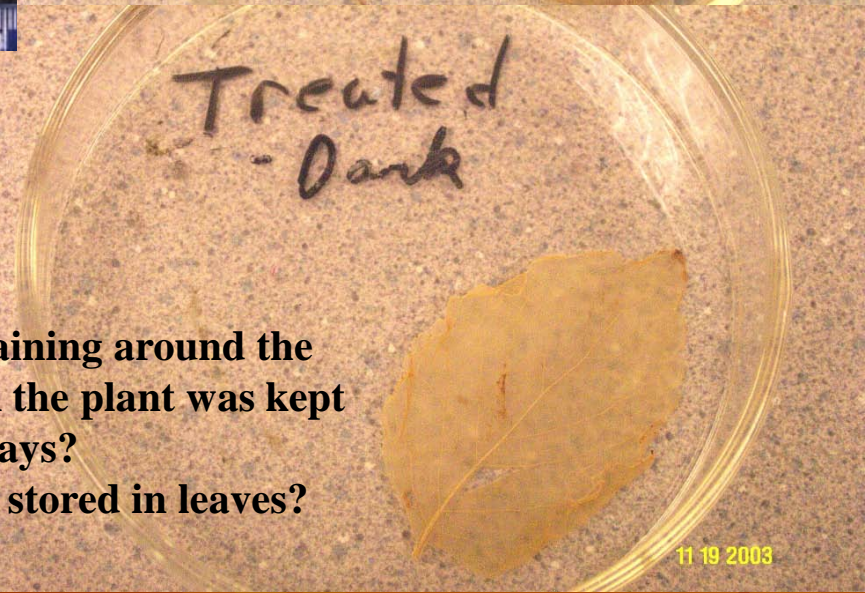
Demo. #2: oxygen gas (O₂) is released as a by product of photosynthesis

Photosynthesis

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**Why was there no staining around the edge of the leaf when the plant was kept in the dark for two days?
Where then is starch stored in leaves?**



Demo. #3: excess glucose is stored as starch in chloroplasts