

Titan TV Presents - Photosynthesis - A Video Interview

Option 1: Your group is asked to prepare a video interview explaining and demonstrating photosynthesis. One student in your group will conduct the interview. **Speak loud, clear, and slow enough so we can understand you.** One student in your group will have to operate the camera. As the camera operator, it is your job to make sure the interview includes **footage of the interviewer asking questions, the group members answering the questions, and footage of the photosynthesis model as it is being used.**



Be **creative** and **have fun** (role play with names, accents etc.) **but be thorough!!!**

You may need to take several "takes".

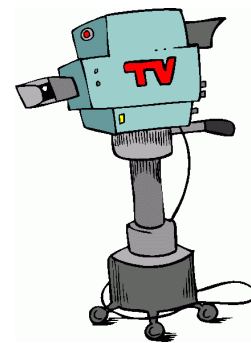
BE SURE TO FILM THE ENTIRE INTERVIEW AS ONE VIDEO SEGMENT/FILE.

BE SURE TO RECORD YOUR INTERVIEW "HORIZONTALLY" AS I CAN NOT ROTATE IT DURING VIEWING

You may need to refer to your DNA replication notes.

Try to keep the interview to **3-4 minutes!!!**

When you are finished **upload to YouTube** set as **unlisted** and email me the link.



Use the following questions to **guide** the interview.

1. Introduce yourself as the reporter. Be creative.
2. Have the other group members introduce themselves.
3. How many steps are there to photosynthesis?
4. What are the names of the steps and can you name the structure/location where each takes place?
5. Can you **show and tell** me how the Light Reaction works?
 - What happens to the oxygen that was once a part of the water?
 - What happens to the protons that were once a part of the water?
 - Where do the electrons go?
 - What "work" do the electrons do at the cytochrome?
 - What happens to the electrons at Photosystem I?
 - What happens to the electrons at the end of the ETS?
 - What happens to all the protons that build up inside the thylakoid?
6. Can you **show and tell** me how the Carbon Fixation Cycle works?
 - What does the light reaction supply to the Carbon Fixation Cycle?
 - What are the raw materials that enter the Carbon Fixation Cycle?
 - What is the end product of the Carbon Fixation Cycle?
 - How many times does the Carbon Fixation Cycle have to turn to produce one sugar?
 - What happens to the ADP and NADP⁺ after they're finished at the Carbon Fixation Cycle?
7. Sign-off when the interview is finished.

Option 2: Create and film a Storyboard Using a Whiteboard.

Tell the entire and complete "story of photosynthesis" from the point of view of a H⁺ (proton). Your story or "journey" must begin with water and end with G₃P. The following "plot line" or journey the H⁺ must take will assist you.

Water -> Inside Thylakoid -> ATPsynthase -> Cytochrome -> Inside Thylakoid -> ATPsynthase -> NADPH -> Carbon Fixation -> G₃P