

Photosynthesis L2: The Light Independent Reaction  
WORKSHEET A



Image: The 'lollipop' apparatus (The Bancroft Library)  
[bancroft.berkeley.edu/Exhibits/Biotech/Images/3-9lg.jpg](http://bancroft.berkeley.edu/Exhibits/Biotech/Images/3-9lg.jpg)

Extension: Can you draw an arrow to match the part to the actual apparatus in the diagram?

Part in the real image (extension)	Role in the experiment (you to fill in)	Represented by
		Conical flask
		Green liquid
		Liquid inside toy test tubes in racking
		C14 syringe
		Tube and pump
		Watch
		Brown paper squares
		Clear square material
		Photo printer

## Photosynthesis: The Light Dependent Reaction

### WORKSHEET B

*These questions will be answered during the live Q&A session. . A transcript of answers will be provided after the event.*

1. What is a C3, C4 and CAM type plant?
2. How exactly does the alcohol kill the algae?
3. What is the formula for calculating the Rf value in chromatography?
4. Other than being turned into Glucose, what other 'fates' of Triose Phosphate are there?
5. What improvements are there to my model of the 'Lollipop' experiment?

Additional questions (not signposted in the video or PowerPoint:

6. What is a Kranz type of leaf anatomy (found in C4 plants)?
7. Where are the enzymes in this reaction coded for, how does this link with evolutionary theory?
8. If light were to 'stop' which compound(s) in the Calvin cycle would build up?

Other questions to raise at the Live Q&A