

Photosynthesis: The Light Dependent Reaction
WORKSHEET A

Part of actual reaction	Role (you to fill in!)	Represented by
Photolysis		Ball pit with blue, red and yellow balls
Hydrolytic enzyme		Peg
Ray of light (680/700nm)		Lanterns
Photosystems		Plant pot
Hydrogen ion		Red ball
Electrons		Yellow ball
Membrane of Thylakoid		Blue play mats
Electron transport chain (plastoquinone and cytochrome)		Play tunnel
NADP		Egg box
ATP Synthase		Garden wind ornament
Ferredoxin		Campervan double egg cup
ATP		Plasticine blobs and cocktail sticks

Photosynthesis: The Light Dependent Reaction

WORKSHEET B

These questions will be answered during the live Q&A session on Wednesday 13th May at 2pm. A transcript of answers will be provided after the event.

1. What is the difference between PSI and PSII?
2. What is the biological significance of Cytochrome? (hint: Phylogenetics)
3. Does photosynthesis have a net gain of ATP?
4. What other types of phosphorylation are there?
5. How do some weed killers act on the electron transport chain in the LDR?
6. Why is PSII first?
7. What other evaluative points for me model are there?

Other questions to raise at the Live Q&A

Related activities:

[An introduction to photosynthesis](#)

[The process of photosynthesis](#)

[Photosynthesis using algae wrapped in jelly balls](#)



Mr Matthew King