

13 Pigments and spectra – Part 2 — Answers

Answers

Work through these after trying the questions yourself.

13.6 A coloured substance that absorbs light.

13.7 Red and blue.

13.8 How much light a pigment absorbs at each wavelength.

13.9 It shows the pigments are what drive photosynthesis.

13.10 $R_f = \text{spot distance} \div \text{solvent distance}$.

13.11 Chlorophyll absorbs red and blue light but *reflects* green light, which is why leaves look green. Because that green light is reflected rather than absorbed, it cannot be used to drive photosynthesis —so green is the least useful colour.