

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.