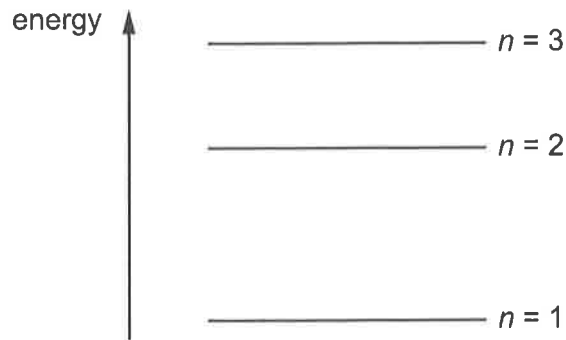


- 28** A discharge lamp contains excited atoms which emit electromagnetic radiation at several wavelengths. The diagram shows the three lowest energy levels of one of these atoms, labelled $n = 1, 2$ and 3 .



Electron transitions between these energy levels can produce three different wavelengths of radiation. The transition from $n = 2$ to $n = 1$ produces radiation of wavelength 440 nm. Radiation of wavelength 590 nm is also emitted.

What is the wavelength of the radiation emitted by the third transition?

- A** 150 nm **B** 250 nm **C** 1030 nm **D** 1730 nm

