

## Applications of the line spectra research assignment

In this independent research assignment, you are to...

Describe what the electromagnetic spectrum is in terms of frequency, wavelength, and energy. Provide a comparison between 2 different wavelengths and their frequencies and energies.

Explain in your write up what having unique line spectra represents in terms of the energy level, electron, and colour. Basically, explain what having a single line spectrum represents in terms of the quantum model of the atom.

Lastly, describe how the line spectrum is useful or applied in every day life. Provide and explain using an example.

### Your task:

Provide a 3 – 4 page typed report with sufficient diagrams to explain your diagrams.

Font size: 11

Line spacing: 1.5

Margins: 2.5cm

### How you are graded:

10 – Perfect score. Perfectly explained, concise, and well written.

9 – Near perfect. Mark was deducted due to minor error (grammar, explanation error etc).

8 – Very good score. Showed very good understanding. Mark lost due missing information or errors

7 - Mediocre. More information is needed. Could be better written

6 – Missing information or not explained correctly.

5 – Passed. Lacking insight and demonstrated weak understanding.

0 – 4 Incomplete, or missing enormous amounts of information, or poorly done.

Make me proud!

