

The Sheffield College - Physics Pre-induction Summer Project

Welcome

Welcome to the A Level Physics Pre-induction Summer Project. We very much look forward to welcoming you in September and as part of your preparation we have developed this task for you to complete and to hand in during the first week of teaching.

This work pack is designed to provide 15 hours of work (5 hours a week over 3 weeks) to prepare you for studying A Level Physics.

TASK - The Electromagnetic Spectrum

Your task is to create a **poster** providing detailed information with supporting pictures of the 7 different regions of the electromagnetic spectrum. I.e. radio waves, microwaves, Infra-red, visible light, ultra violet, X-ray, Gamma.

Tips:

- You may find an A3 size poster easier to include all the information on. You could glue or sticky tape two sheet of A4 paper together.
- I would ideally like this as a handwritten poster - although you do **not** need to hand draw the images. (You could obtain them from the Internet and physically cut and glue them onto your poster.)
- You can do this completely on computer if you have access to one (e.g. using MS Word, Publisher, Google Docs etc.)
- No credit will be given if you simply copy and paste a poster from the Internet onto a sheet of paper.

Things to include (the more you include, the more credit you get):

- Image relating to that region
- Use of that region, in everyday life or science.
- Properties of those waves unique to each region (some properties are the same for more than one region)
- Approximate size of the wavelength of the waves in each region e.g. 10^{-3} to 10^{-7} m.
- Danger / hazard / harmful effects of each region (some regions may have no known harmful effects)
- Any additional information - including any things that are the same no matter what region is being looked at.

On the back of your poster, write a list of the **names** of the websites or books you used in your research. (No credit will be given for simply listing "Google" or "Wikipedia") (You do **not** need to write out the long web addresses)