

## Science work – Year 10 – Triple Physics

The tasks to work through each week from your CGP guide and workbook from June 15<sup>th</sup> until the end of the summer term are given below. You will also have a short Educake test and additional online resources to help you with your work will be given. The additional resources will be updated frequently and links to these will be available on the school website.

### Groups:

| Week    | Topic  | CGP Guide pages | Workbook pages | Educake task                      | Additional resources   |
|---------|--|-----------------|----------------|-----------------------------------|--|
| 15/6/20 | P1 review  | 11-23           | 1-12           | P1 Review                         | BBC bitesize, Physics and Maths Tutor  |
|         | <b>Task Instructions:</b> Complete the P1 review questions (CGP Guide, pg23) Identify strengths and weaknesses by marking your answers. Pick two pages that contain information you didn't know. Create a mind map from those two pages.               |                 |                |                                   |  |
| 22/6/20 | Longitudinal and Transverse waves  | 73-73           | 71-72          | Longitudinal and Transverse waves | Animations that show the waves:<br><a href="https://www.acs.psu.edu/drussell/Demos/waves/wavemotion.html">https://www.acs.psu.edu/drussell/Demos/waves/wavemotion.html</a><br><br>What are seismic waves?<br><a href="https://www.britannica.com/video/181934/rock-vibrations-Earth-earthquake-waves-P-surface">https://www.britannica.com/video/181934/rock-vibrations-Earth-earthquake-waves-P-surface</a> |
|         | <b>Task Instructions:</b> Draw a cartoon for each type of wave. Create a table listing the similarities and difference of each type of wave. Explain how experiments can be used to demonstrate wave properties.                                       |                 |                |                                   |  |
| 29/6/20 | Reflection   | 75              | 73             | Reflection of light               | Reflection of light<br><a href="https://www.youtube.com/watch?v=8K6gOST8pZk">https://www.youtube.com/watch?v=8K6gOST8pZk</a><br><br>BBC bitesize reflection<br><a href="https://www.bbc.co.uk/bitesize/guides/zdwnb9q/revision/2">https://www.bbc.co.uk/bitesize/guides/zdwnb9q/revision/2</a>   |
|         | <b>Task Instructions:</b> Read CGP Guide pages and explain the difference between light reflection on plane surfaces and uneven surfaces. Draw a diagram and explain how the angle of incidence relates to the angle of reflection.                    |                 |                |                                   |  |
| 6/7/20  | Refraction   | 76              | 74             | Refraction of light               | Refraction video<br><a href="https://www.youtube.com/watch?v=UUc44Vg5pCI">https://www.youtube.com/watch?v=UUc44Vg5pCI</a><br><br>Refraction website<br><a href="https://www.gcse.com/waves/refraction2.htm">https://www.gcse.com/waves/refraction2.htm</a>   |
|         | <b>Task Instructions:</b> Read CGP Guide page, bottom half. Explain what refraction is, use diagrams to explain. Explain the difference between light passing from a dense to less dense medium, from light passing from a less dense to dense medium. |                 |                |                                   |  |
| 13/7/20 | Electromagnetic waves  | 76              | 74             | Electromagnetic waves             | Electromagnetic spectrum video<br><a href="https://www.youtube.com/watch?v=u5vkYjV1V1A">https://www.youtube.com/watch?v=u5vkYjV1V1A</a><br><br>Electromagnetic spectrum NASA website:<br><a href="https://imagine.gsfc.nasa.gov/science/toolbox/emspectrum1.html">https://imagine.gsfc.nasa.gov/science/toolbox/emspectrum1.html</a>   |
|         | <b>Task Instructions:</b> Read CGP Guide page, top half. List the main waves in the electromagnetic spectrum. Create a mnemonic to remember the order. List two uses and properties for each of the waves.   |                 |                |                                   |  |