Edexcel International GCSE Physics 4PH1 Learning Plan

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| **Unit: 1 Forces and Motion** | | **Chapter: 2. Forces and Shape** | | **Hours: 4** |
| Content coverage | Learning outcomes | Resources | Assessment | |
| **Section 1: Forces and Motion**  **c)** Forces, movement, shape and momentum | **1.11** describe the effects of forces between bodies such as changes in speed, shape or direction  **1.12** identify different types of force such as gravitational or electrostatic  **1.13** understand how vector quantities differ from scalar quantities  **1.14** understand that force is a vector quantity  **1.15** calculate the resultant force of forces that act along a line  **1.16** know that friction is a force that opposes motion  **1.22** *practical: investigate how extension varies with applied force for helical springs, metal wires and rubber bands*  **1.23** knowthat the initial linear region of a force-extension graph is associated with Hooke’s law  **1.24** describe elastic behaviour asthe ability of a material to recover its original shape after the forces causing deformation have been removed. | Video and Powerpoint:  1.5 Forces 1.  Textbook pages:  Page 19 – All sorts of forces  Page 20 – Some other examples of forces  Page 20 – More than one force  Page 21 – Balanced and unbalanced forces  Page 21 – Friction  Page 23 – Changing shapes  Page 23 – Temporary changes of shape  Page 23 – Springs and wirePage 24 – *Practical – Investigate how th extension of a spring changes with load*  Page 25 – Elastic bands | Page 26 – 27  Questions (1) to (9)  Chapter 2 Textbook Answers (PDF)  Chapter 2 - exam question - pdf  Chapter 2 - exam question mark scheme – pdf  Chapter 2 - Talking paper video | |

Videos – [www.igcsesciencecourses.com](http://www.igcsesciencecourses.com)

Textbook Ref: Edexcel International GCSE (9-1) Physics Student Book - Pearson (Arnold, Johnson, Woolley))