Edexcel International GCSE Physics 4PH1 Learning Plan

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| **Unit: 5 Solids, Liquids and Gases** | | **Chapter: 18. Density and Pressure** | | **Hours: 4** |
| Content coverage | Learning outcomes | Resources | Assessment | |
| Section 5: Solids, liquids and gases  a) Units  b) Density and pressure | **5.1** use the following units: degree Celsius (°C), Kelvin (K), joule (J), kilogram (kg), kilogram/metre3 (kg/m3), metre (m), metre2 (m2), metre3 (m3), metre/second (m/s), metre/second2 (m/s2), newton (N) and pascal (Pa)  **5.2** use the following unit: joules/kilogram degree Celsius (J/kg °C)  **5.3** know and use the relationship between density, mass and volume:  density= mass /volume  ρ = *Vm /*  **5.4** *practical: investigate density using direct measurements of mass and volume*  **5.5** know and use the relationship between pressure, force and area: pressure = force/  area  *p* = *F/A*  **5.6** understand how the pressure at a point in a gas or liquid at rest acts equally in all directions  **5.7** know and use the relationship for pressure difference: pressure difference = height × density × gravitational field strength *p*=*h*×*ρ*×*g* | Video and Powerpoint:  1.4 Density  1.11 Pressure  Textbook pages:  Page 173 – Density  Page 174 – **Practical** – *Investigate the density of solids*  Page 175 – Pressure under a solid  Page 176 – Pressure in liquids and gases  Page 178 – Pressure and depth  Page 179 – Looking ahead – Weather and Pressure | Page 180  Questions (1) to (3)  Chapter 18 Textbook Answers (PDF)  Chapter 18 Chapter - exam question - pdf  Chapter 18 - exam question mark scheme – pdf  Chapter 18 - 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))