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 gasesa) Unitsb) 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 Density1.11 Pressure Textbook pages:Page 173 – DensityPage 174 – **Practical** – *Investigate the density of solids*Page 175 – Pressure under a solidPage 176 – Pressure in liquids and gasesPage 178 – Pressure and depthPage 179 – Looking ahead – Weather and Pressure | Page 180Questions (1) to (3)Chapter 18 Textbook Answers (PDF)Chapter 18 Chapter - exam question - pdfChapter 18 - exam question mark scheme – pdfChapter 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))