Edexcel iGCSE Physics Checklist

Section E20: Solids, Liquids and Gases

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| ***I can***  | ☺ | 😐 | ☹ |
| understand the changes that occur when a solid melts to form a liquid, and when a liquid evaporates or boils to form a gas |  |  |  |
| describe the arrangement and motion of particles in solids, liquids and gases |  |  |  |
| understand the significance of Brownian motion, as supporting evidence for particle theory |  |  |  |
| understand that molecules in a gas have a random motion and that they exert a force and hence a pressure on the walls of the container |  |  |  |
| understand why there is an absolute zero of temperature which is –273oC  |  |  |  |
| describe the Kelvin scale of temperature and be able to convert between the Kelvin and Celsius scales |  |  |  |
| understand that an increase in temperature results in an increase in the average speed of gas molecules |  |  |  |
| understand that the Kelvin temperature of the gas is proportional to the average kinetic energy of its molecules |  |  |  |
| describe the qualitative relationship between pressure and Kelvin temperature for a gas in a sealed container |  |  |  |
| use the relationship between the pressure and Kelvin temperature of a fixed mass of gas at constant volume:P1/T1 = P2/T2  |  |  |  |
| use the relationship between the pressure and volume of a fixed mass of gas at constant temperature: p1V1 =p2V2  |  |  |  |