**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Week 1 – Gas Laws**

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Significant gaps** | **Some guessing** | **Great command** |
| The E-format convention |  |  |  |
| Variables with units |  |  |  |
| Intermolecular bond strengths, part 1 |  |  |  |
| Intermolecular bond strengths, part 2 |  |  |  |
| Order of operations |  |  |  |
| Equations of state |  |  |  |

**Week 2 – Thermodynamic surfaces**

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Significant gaps** | **Some guessing** | **Great command** |
| Visualizing derivative thermodynamic surfaces, part 1 |  |  |  |
| Visualizing derivative thermodynamic surfaces, part 2 |  |  |  |
| Slicing |  |  |  |
| Analytical partial derivatives |  |  |  |

**Week 3 – Probability density functions**

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Significant gaps** | **Some guessing** | **Great command** |
| The kinetic-molecular theory of gases |  |  |  |
| Probability densities, part 1 |  |  |  |
| Probability densities, part 2 |  |  |  |
| Probabilities from probability densities |  |  |  |
| Analytical moments of the speed |  |  |  |

**Week 4 – Internal energy**

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Significant gaps** | **Some guessing** | **Great command** |
| Equipartition |  |  |  |
| Heat capacities, part 1 |  |  |  |
| Heat capacities, part 2 |  |  |  |
| Heat capacities, part 3 |  |  |  |
| Interpreting |  |  |  |
| Analytical |  |  |  |
| Analytical |  |  |  |