**Task 3 : Physics 11 Energy Efficient House Marking Grid: Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **A THEORY** | Part marks | Max  Mark | Mark | Comments |
| 1. **Radiation** |  | **3** |  |  |
| 1. **Conduction** |  | **3** |  |  |
| 1. **Convection** |  | **3** |  |  |
| **TOTAL PRELAB** |  | **9** |  |  |
| B. DESIGN |  |  |  |  |
| HOUSE |  |  |  |  |
| **Detailed drawing of house** |  | **10** |  |  |
| Clear diagram (2) |  |  |  |  |
| Clear measurements (3) |  |  |  |  |
| Energy efficient features labelled, at least 2 (5) |  |  |  |  |
| List of materials |  | **5** |  |  |
| Explanation energy efficient features  Describes at least 2, incorporates features |  | **10** |  |  |
| Extra innovations |  | **5** |  |  |
| EXPERIMENT |  |  |  |  |
| Aim/ hypothesis |  | **2** |  |  |
| Method  (5, shows basic idea, 10 very detailed ) |  | **10** |  |  |
| Equipment Needed –all included |  | **5** |  |  |
| Identifies independent, dependent and control variables |  | **3** |  |  |
| **TOTAL DESIGN** |  | **50** |  |  |

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

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| --- | --- | --- | --- | --- |
| **C. CONDUCTING** |  |  |  |  |
| 1. BUILDING HOUSE |  | **10** |  |  |
| (10 totally independent, 5 with assistance) |  |  |  |  |
| 1. CONDUCTING EXPERIMENT |  | **10** |  |  |
| Presentation of results (Tables/graphs) |  | **10** |  |  |
| **TOTAL CONDUCTING** |  | **30** |  |  |
| **D. ANALYSIS/ CONCLUSION** |  |  |  |  |
| **Analysis of results** |  | **10** |  |  |
| Errors/Uncertainties |  | **3** |  |  |
| Discussion of effectiveness house |  | **10** |  |  |
| Conclusion |  | **5** |  |  |
| **TOTAL ANALYSIS/ CONCLUSION** |  | **28** |  |  |
| **F. REAL LIFE**  energy efficient design into houses and buildings  (4, general reasons – 8 ties in physics) |  | **8** |  |  |
| **TOTAL REAL-LIFE** |  | **8** |  |  |
|  |  |  |  |  |
| **TOTAL INVESTIGATION** |  | **125** |  |  |
| **TOTAL INVESTIGATION** |  | **100** |  |  |