Heat Design Problem

|  |  |
| --- | --- |
| Specific Heat of Ice | 2090 J kg-1 K-1 |
| Specific Heat of Water | 4180 J kg-1 K-1 |
| Specific Heat of Steam | 2000 J kg-1 K-1 |
| Latent Heat of Fusion | 334,000 J kg-1 |
| Latent Heat of Vaporization | 2,260,000 J kg-1 |

Design a scenario with an initial and final temperature that includes a phase change and requires a **heat transfer of exactly 1,000,000 J**

Record your values in the table below and show all calculations

|  |  |
| --- | --- |
| Mass of H2O |  |
| Initial Temperature |  |
| Final Temperature |  |