

## Modeling Nuclear Reactions

There are many misconceptions regarding the term “nuclear” and what it means to people. *Feel free to add in your own scenarios and expand.*

Your task is to create a poster modeling the processes of nuclear fission and fusion. You may work in a group of two. However, if you don't complete this in the designated amount of class time, you will be responsible to finish it together outside of class.

- Clearly label each process
- Represent all involved particles and provide a clear key
- Represent the energy input and output of each system
- Provide real life examples of each process
- No clipart, internet or printed pictures
- Be creative and neat
- Attach rubric to finished product

Scoring Rubric:

|  | 6  | 4   | 2   |
|--|--|---|---|
| Sub-Atomic Particle Representations- Fission | All particles are accurately represented before, during, and after the process | Some particles are accurately represented throughout the process <b>OR</b> all particles are represented accurately during parts of the process | Particles are not accurately represented  |
| Energy Representations- Fission              | Energy input <b>AND</b> output are accurately represented                      | Either energy input <b>OR</b> output are accurately represented   | Energy flow is not accurately represented |
| Sub-Atomic Particle Representations- Fusion  | All particles are accurately represented before, during, and after the process | Some particles are accurately represented throughout the process <b>OR</b> all particles are represented accurately during parts of the process | Particles are not accurately represented  |
| Energy Representations- Fusion               | Energy input <b>AND</b> output are accurately represented                      | Either energy input <b>OR</b> output are accurately represented   | Energy flow is not accurately represented |
| Element Labelling                            | Elements are correctly labeled in all parts of the process.                    | Elements are either correctly labeled in some parts of the process <b>OR</b> are not all labeled  | Elements are not clearly labeled          |
| Real Life Examples                           | Examples provided for both fission <b>AND</b> fusion.                          | Example provided for only fission <b>OR</b> fusion  | No examples provided                      |