Atom or atomic bombs are nuclear weapons. Their energy comes from reactions that take place in the nuclei of their atoms.

During World War Two, “atomic bomb” usually meant a bomb that relies on fission, or the splitting of heavy nuclei into smaller units, releasing energy. The action happens in the nucleus of the atom, so it is probably more accurate to call these “nuclear bombs.”

“Hydrogen bombs,” or thermonuclear weapons, use a fission bomb to start a fusion reaction where light nuclei, with few protons and neutrons, join together and release energy. This is the reaction that powers stars. These weapons are more powerful than fission weapons.

So if heavy elements like uranium fission, and light elements like hydrogen fuse, what is in the middle? Iron is the center of stability. Iron will not fuel any kind of nuclear weapon. In fact, stars, which run on fusion, die when they build up too much iron in their cores.

By the way, I have heard that when Dr. Norris Bradbury, after whom this museum is named, visited classrooms, he would write the word “nuclear” on the chalkboard, and have the students pronounce it: “nuclear.”