5. The energy released would be twice the rest energy of Earth, or $E = 2mc^2 = 2(5.98 \times 10^{24}\,\text{kg})(2.998 \times 10^8\,\text{m/s})^2 = 1.08 \times 10^{42}\,\text{J}$. The mass of Earth can be found in Appendix C.