

## <sup>145</sup>Nd

The 1933 publication “Constitution of Neodymium, Samarium, Europium, Gadolinium and Terbium” by Aston reported the first observation of <sup>145</sup>Nd ([1933As02](#)). Accelerated anode rays from the Cavendish laboratory mass spectrograph were analyzed and their masses identified. “Three isotopes, 142, 144, 146, of neodymium (60) had already been identified by the first mass spectrograph. These are now found to be definitely in descending order of abundance and 143 and 145 also shown to be present.” A possible presence of <sup>145</sup>Nd had been mentioned by Aston earlier ([1924As04](#), [1925As02](#)).

Adapted from reference ([2012Gr02](#))

- [1924As04](#) F. W. Aston, Nature **114**, 273 (1924).  
[1925As02](#) F. W. Aston, Phil. Mag. **49**, 1191 (1925).  
[1933As02](#) F. W. Aston, Nature **132**, 930 (1933).  
[2012Gr02](#) J. L. Gross, J. Claes, J. Kathawa, and M. Thoennessen, At. Data Nucl. Data Tables **98**, 75 (2012).

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