Deuterium
This rare heavy isotope of hydrogen was distilled from liquid hydrogen at NIST and identified by Columbia University’s Harold Urey (Nobel Prize 1934).

Image Credit: Uwe Arp/NIST

Krypton
The wavelength of light from this atom was used to define the official meter until 1983.

Image Credit: Neil Tucker/Wikimedia

Cesium
The frequency of light absorbed by this atom, measured by atomic clocks such as NIST-F4, has been used to officially define the second since 1967.

Image Credit: NIST

Sodium
A gas of these atoms was cooled with lasers by NIST scientists to reach temperatures near absolute zero (Nobel Prize 1997).

Image Credit: H. Mark Helfer/NIST

Rubidium
Researchers at JILA (NIST-CU Boulder) used these atoms to create a new state of matter called a Bose-Einstein condensate (Nobel Prize 2001).

Image Credit: NIST/JILA/CU-Boulder

Potassium
JILA researcher Debbie Jin and her colleagues coaxed pairs of these atoms into forming another new state of matter known as a fermionic condensate.

Image Credit: JILA

Aluminum
Electrically charged versions of these atoms (ions) have been used to create "quantum logic" clocks with record accuracy.

Image Credit: NIST

Beryllium
Ions of these atoms have performed quantum logic operations that could lay groundwork for future quantum computers.

Image Credit: S. Burrows/JILA

Strontium and Ytterbium
NIST and JILA researchers trapped thousands of these atoms in webs of light known as optical lattices to create ultraprecise and stable atomic clocks.

Image Credit: NIST

Charlotte Moore Sitterly
From 1945 to 1985, this NIST astrophysicist published critically reviewed tables of atomic data, establishing the agency as an authoritative source of this information.

Image Credit: NIST