

Day 1 Vocabulary

atomic number - number of protons in the nucleus of an atom of a given element

density - mass of an object divided by its volume

electron - negatively charged particle that exists in an electron cloud formation around an atom's nucleus

electron cloud - region surrounding the nucleus of an atom, where electrons are most likely to be found

element - substance that cannot be broken down into simpler substances

Day 2 Vocabulary

- **groups** - family of elements in the periodic table that have similar physical or chemical properties
- **half-life** - time needed for on half the mass of a sample of a radioactive isotope to decay
- **ions** - atoms that are no longer neutral because it has gained or lost an electron
- **isotope** - atoms of the same element that have different numbers of neutrons
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Day 3 Vocabulary

- **mass** - amount of matter in an object
- **mass number** - the sum of neutrons and protons in the nucleus of an atom
- **neutron** - electrically-neutral particle that has the same mass as a proton and is found in an atom's nucleus
- **periods** - horizontal row of elements in the periodic table whose properties change gradually and predictably
- **proton** - positively-charged particle in the nucleus of an atom
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Day 4 - Vocabulary

- **radioactive decay** - release of nuclear particles and energy from unstable atomic nuclei
 - **transmutation** - the changing of one element into another through radioactive decay
- volume** - amount of space an object occupies