

The Periodic Table of the Elements

Legend:

- alkali metals
- alkali earth metals
- transitional metals
- other metals
- semiconductors
- other non-metals
- halogens
- noble gases
- unknown type

Vertical column on the far right

Periodic Table : Group 0

Noble Gases

non-metal elements

all have low boiling points:
helium (He) has the lowest boiling point of any element

going down group 0

atoms become larger
intermolecular forces become stronger
more energy is needed to overcome these forces

The gases are inert

extremely unreactive
do not take part in chemical reactions.
already have stable arrangements of electrons
no tendency to lose, gain, or share electrons

All have complete outer shells

helium has two electrons
the other noble gases all have eight electrons in the outer shell