Cause of name of transition elements

Transitional behaviour between s and p block elements

Transition elements in terms of electronic configuration

Elements of partially filled d orbitals

General expression for outer electronic configuration for transition elements

$$(n-1)d^{1-10}s^{1-2}$$

Cause of deviation from general electronic configuration in some transition elements

- Low energy gap between d and s orbital
- Stability of half and full filled states

List of shells in transition metals where valance electrons are present

- Outer most
- Second outermost

2 shells have valance electrons in transition metals

Number of division of transition metals in terms of series

4

List of division of transition metals in terms of series

- First transition series
- Second transition series
- Third transition series
- Fourth transition series

Term for first transition series in transition elements

3d series

Term for second transition series in transition elements

4d series

Term for third transition series in transition elements

5d series

Term for fourth transition series in transition elements

6d series

Period of first transition series in transition metals

4th period

Period of second transition series in transition metals

5th period

Period of third transition series in transition metals

6th period

Period of fourth transition series in transition metals

7th period

Atomic number of scandium

21

Atomic number of Zinc

30

Atomic number of Yttrium

39

Atomic number of Cadmium

48

Atomic number of Lanthanum

57

Atomic number of Mercury

80

Atomic number of Halfium

72

Atomic number of Actinium

89

Atomic number of Rutherfordium

104

Elemental range of first transition series in transition metals

Scandium to Zinc

Elemental range of second transition series in transition metals

Yttrium to Cadmium

Elemental range of third transition series in transition metals

Lanthanum and Halfium to Mercury

Elemental range of fourth transition series in transition metals

Actinium to Rutherfordium

Cause of exclusion of zinc , cadmium and mercury from transition elements

Completely filled d orbitals