Perovskite compounds have a distinct crystalline structure and therefore have unique physical properties.Since lead is a toxic element, the most suitable compounds to replace CsPbI3 compound and have the same electronic properties are: CsCaI3 and KGeI3 for halides.It gives the detail of the crystalline accommodation law which states that; V_F/V_B =n VEC/2 where VF is the volume of Fermi sphere, VB is the volume of Brillouin zone, n is the number of atoms per lattice point and VEC is the number of valence electrons per the number of atoms.In addition, we found that the compounds suitable for applications in optoelectronics and solar cells have the lowest Fermi energy, the lowest quantum state volume, and the largest number of Brillouin zones in the valence band as for the compound CsPbI3, which is used in these applications.In results, it is found that the crystalline accommodation law achieved a great success in classifying halides and perovskite oxides according to the ratio of shared valence electrons in bonds to the number of atoms (VEC).Perovskite oxides also have various physical properties, such as: ferromagnetism, antiferromagnetism, ferroelectricity, antiferroelectricity, piezoelectricity, peroelectricity, and superconductivity.In view of the great success achieved by the law of crystal accommodation to explain the crystal structure of materials, the aim of the present work was to use the law of crystal accommodation to explain the crystal structure of perovskite compounds, halides and oxides, and to study their electronic structure and electrical properties based on this model.The classification was as follows: Perovskite halides and oxides molecules are bonded by a ratio of 4.8 of the valence electrons to the number of atoms.Accordingly, the cubic system is formed, whether in oxides or halides, when VF/VB equals 12.For cubic perovskite oxides and halides the valence band consists of 12 Brillouin zones.The hexagonal oxides and halides perovskites are formed when VF/VB equals 24.The orthorhombic oxides and halides perovskites are formed when, when VF/VB equals 48.In the hexagonal pervoskites, the valence band contains 48 electrons.