Graphite ->It is an allotrope of carbon. ->It is sp2 hybridized and have triangular plane geometry.

Structure of Graphite ->6 atoms of carbon are bonded together with covalent to form hexagon. ->These hexagons join each other and form a layer called graphene. ->Forth electron is free to move and hence conducts electricity. ->Different layers of graphene are connected by weak wander Waal forces.

Properties of Graphite-> ->It is greyish black in color. ->Due to a free electron, it behaves as a good conductor. ->It has metallic Lustre. ->High melting point due to strong covalent bond. ->Slippery nature due to weak Vanderwaal force in its layers.

Applications of Graphite-> ->Due to its soft and slippery nature, it is used in making pencil leads. ->It is also used as lubricant due to weak Vanderwaal forces between its layers. ->It is also used as electrodes due to its conductivity. ->It is also used as conductive ink in screen printing.