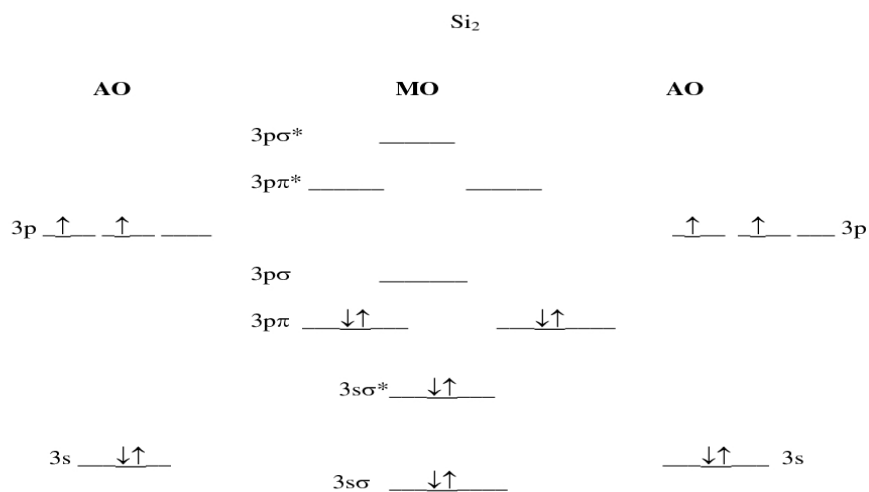


Molecular Orbital Worksheet Key

1. Draw appropriate MO diagrams for the diatomic molecules Si_2 and SO^+ . For each, determine the bond order and whether the molecule is paramagnetic or diamagnetic.



Bond order = $\frac{1}{2} (6-2) = 2$

All the electrons are paired, the molecule is **diamagnetic**