

Physical Science
Electronegativity Worksheet – Level 1

Name: _____ Block: ____

Categorize the following bonds as ionic, polar covalent, or covalent:

1. CaCl₂
2. SO₂
3. MgO₂
4. P₄O₆
5. B₂O₃
6. Br₂
7. GaAs
8. LiN₃

Table of Electronegativities:

| CHEMIX - PERIODIC TABLE | | | | | | | | | | | | | | | | | | | |
|---|----------------------|----------------------|----------------------|---------------------|----------------------|----------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|-----------------------|----------------------|----------------------|------------------------|-------------------------|-------------|----|
| Graphics Close | | | | | | | | | | | | | | | | | | | |
| <input type="radio"/> Atomic number <input type="radio"/> First ionization potential V <input type="radio"/> Electron configuration <input type="radio"/> Name <input type="radio"/> Specific heat capacity Jg ⁻¹ K ⁻¹ <input type="radio"/> Oxidation states <input type="radio"/> Relative atomic mass u <input type="radio"/> Electrical conductivity *10 ⁶ Ohm ⁻¹ cm ⁻¹ <input type="radio"/> Phase 20 °C <input type="radio"/> Melting point °C <input type="radio"/> Thermal conductivity Wcm ⁻¹ K ⁻¹ <input type="radio"/> Crystal structure 18/VIIA <input type="radio"/> Boiling point °C <input checked="" type="radio"/> Electronegativity Pauling <input type="radio"/> Density g/cm ³ <input type="radio"/> Heat of fusion kJ/mol <input type="radio"/> Covalent radius *10 ⁻¹⁰ m <input type="radio"/> Heat of vaporization kJ/mol <input type="radio"/> Atomic radius *10 ⁻¹⁰ m <input type="radio"/> Acid-base properties <input type="radio"/> Atomic volume cm ³ /mol <input type="radio"/> Number of stable isotopes | | | | | | | | | | | | | | | | | | | |
| Group 1/IA 2.200 H | 2/IIA 1.570 Li | | | | | | | | | | | 13/IIIA 2.040 B | 14/IVA 2.550 C | 15/VA 3.040 N | 16/VI 3.440 O | 17/VIIA 3.980 F | 18/VIIIA He | | |
| 0.980 Na | 1.310 Mg | 3/IIIB 0.820 K | 4/IVB 1.000 Ca | 5/VB 1.360 Sc | 6/VIB 1.540 Ti | 7/VIIB 1.630 V | 8/VIII 1.660 Cr | 9/VIII 1.550 Mn | 10/VIII 1.830 Fe | 11/VIII 1.880 Co | 12/VIII 1.910 Ni | 13/IIIA 1.900 Cu | 14/IVA 1.650 Zn | 15/VA 1.810 Ga | 16/VI 2.010 Ge | 17/VIIA 2.180 As | 18/VIIIA 2.550 Se | 2.960 Br | Ar |
| 0.930 Rb | 1.100 Sr | 1.330 Y | 1.600 Zr | 2.160 Nb | 1.900 Mo | 2.200 Tc | 2.280 Ru | 2.200 Rh | 2.200 Pd | 1.930 Ag | 1.690 Cd | 1.780 In | 1.960 Sn | 2.050 Sb | 2.100 Te | 2.660 I | 2.000 Xe | | |
| 0.790 Cs | 0.890 Ba | 1.100 La | 1.300 Hf | 1.500 Ta | 2.360 W | 1.900 Re | 2.200 Os | 2.280 Ir | 2.540 Pt | 2.000 Au | 2.000 Hg | 2.040 Tl | 2.330 Pb | 2.020 Bi | 2.000 Po | 2.200 At | 2.200 Rn | | |
| 0.700 Fr | 0.900 Ra | 1.100 Ac | | | | | | | | | | | | | | | | | |
| Lanthanides -> | | | 1.120 Ce | 1.130 Pr | 1.140 Nd | 1.130 Pm | 1.170 Sm | 1.200 Eu | 1.200 Gd | 1.200 Tb | 1.220 Dy | 1.230 Ho | 1.240 Er | 1.250 Tm | 1.110 Yb | 1.270 Lu | | | |
| Actinides -> | | | 1.300 Th | 1.500 Pa | 1.380 U | 1.360 Np | 1.280 Pu | 1.300 Am | 1.300 Cm | 1.300 Bk | 1.300 Cf | 1.300 Es | 1.300 Fm | 1.300 Md | 1.300 No | 1.300 Lr | | | |