Lewis Structure Worksheet

1. Draw Lewis dot structures for each of the following elements:

A) antimony B) magnesium C) silicon D) iodine

1. Draw the Lewis Structures for the following molecules.

|  |  |
| --- | --- |
| 1. CH4   Total # Valence Electrons:  Lewis Structure: | 1. H2O   Total # Valence Electrons:  Lewis Structure: |
| 1. ClO3-   Total # Valence Electrons:  Lewis Structure: | 1. HCN   Total # Valence Electrons:  Lewis Structure: |
| 1. H3O+   Total # Valence Electrons:  Lewis Structure: | 1. NH3   Total # Valence Electrons:  Lewis Structure: |
| 1. NH2-   Total # Valence Electrons:  Lewis Structure: | 1. N3-   Total # Valence Electrons:  Lewis Structure: |
| 1. NH4+   Total # Valence Electrons:  Lewis Structure: | 1. NOF   Total # Valence Electrons:  Lewis Structure: |
| 1. C2H4   Total # Valence Electrons:  Lewis Structure: | 1. ClF2+   Total # Valence Electrons:  Lewis Structure: |
| 1. C2H2   Total # Valence Electrons:  Lewis Structure: | 1. FNO2   Total # Valence Electrons:  Lewis Structure: |
| 1. PO4-3   Total # Valence Electrons:  Lewis Structure: | 1. CH2O   Total # Valence Electrons:  Lewis Structure: |
| 1. H2O2   Total # Valence Electrons:  Lewis Structure: | 1. F2O   Total # Valence Electrons:  Lewis Structure: |

Lewis Structure Worksheet Key

1. Draw Lewis dot structures for each of the following elements:

A) antimony B) magnesium C) silicon D) iodine

Sb Mg Si I

1. Draw the Lewis Structures for the following molecules.

|  |  |
| --- | --- |
| 1. CH4   Total # Valence Electrons: **8**  Lewis Structure: | 1. H2O   Total # Valence Electrons: **8**  Lewis Structure: |
| 1. ClO3-   Total # Valence Electrons: **26**  Lewis Structure: | 1. HCN   Total # Valence Electrons: **10**  Lewis Structure: |
| 1. H3O+   Total # Valence Electrons: **8**  Lewis Structure: | 1. NH3   Total # Valence Electrons: **8**  Lewis Structure: |
| 1. NH2-   Total # Valence Electrons: **8**  Lewis Structure: | 1. N3-   Total # Valence Electrons: **16**  Lewis Structure: |
| 1. NH4+   Total # Valence Electrons: **8**  Lewis Structure: | 1. NOF   Total # Valence Electrons: **18**  Lewis Structure: |
| 1. C2H4   Total # Valence Electrons: **12**  Lewis Structure: | 1. ClF2+   Total # Valence Electrons: **20**  Lewis Structure: |
| 1. C2H2   Total # Valence Electrons: **10**  Lewis Structure: | 1. FNO2   Total # Valence Electrons: **24**  Lewis Structure:    **Resonance** |
| 1. PO4-3   Total # Valence Electrons: **32**  Lewis Structure: | 1. CH2O   Total # Valence Electrons: **12**  Lewis Structure: |
| 1. H2O2   Total # Valence Electrons: **14**  Lewis Structure: | 1. F2O   Total # Valence Electrons: **20**  Lewis Structure: |