

Lewis Structures of Atoms, Ions and Ionic Compounds WS

| # | Question | Answer | |
|---|--|-------------------------|------------------------|
| 1 | What is the octet rule? Explain its role in bonding between atoms | | |
| 2 | Indicate how many electrons must be gained or lost by each of the following atoms to achieve a stable electron configuration (3 lost, 2 gained, etc) | a) Sr b) Sb c) Si | d) S e) Se f) Xe |
| 3 | Which of the following pairs of elements will not form ionic compounds? Explain why or why not for each pair. | Sulfur and Xenon | Sodium and Calcium |
| | | Strontium and Sulfur | Selenium and Chlorine |
| 4 | Draw the Lewis Structure for the following Ions or Compounds | | |
| | a) K | f) K ⁺ | |
| | b) Ba ²⁺ | g) BaF ₂ | |
| | c) C | h) C ⁴⁻ | |
| | d) MgO | i) S ²⁻ | |
| | e) Br | j) Na ₂ S | |

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