

Materials Formative Test 1 Solutions

1.

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|----------------------------------|----------------------------------|
| a) Mg ²⁺ | b) I ⁻ |
| c) CO ₃ ²⁻ | d) PO ₄ ³⁻ |
| e) N ³⁻ | f) Zn ²⁺ |
| g) Cu ²⁺ | h) Ag ⁺ |

2.

- | | |
|-----------------------------------|---------------------------------------|
| a) NaNO ₃ | b) Zn(HCO ₃) ₂ |
| c) Al ₂ S ₃ | d) Pb(SO ₄) ₂ |
| e) CuBr ₂ | f) NH ₄ OH |
| g) KCl | h) CrPO ₄ |

3.

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|-------|
| a) 6 |
| b) 17 |
| c) 10 |
| d) 6 |

4.

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|-------------|-------------|
| a) covalent | b) metallic |
| c) ionic | d) covalent |
| e) ionic | |

5.

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| a) 2, 6 |
| b) 2, 8, 8 |

6.

- a) Al(OH)_{3(aq)} + 3HCl_(aq) → AlCl_{3(aq)} + 3H₂O_(l)
- b) Pb(NO₃)_{2(aq)} + K₂SO_{4(aq)} → 2KNO_{3(aq)} + PbSO_{4(s)}
- c) 2Ca_(s) + O_{2(g)} → 2CaO_(s)
- d) Barium + sulfuric acid → barium sulfate + hydrogen gas
Ba + H₂SO₄ → BaSO₄ + H₂
- e) Calcium carbonate + hydrochloric acid → carbon dioxide + water + calcium chloride
CaCO₃ + 2HCl → CO₂ + H₂O + CaCl₂