

Answers
Physical Science 10
Chemistry Exam Review #2

1. Write the names of the following compounds:

- a) CO_2 carbon dioxide
- b) N_2O_5 dinitrogen pentaoxide
- c) PF_5 phosphorous pentafluoride
- d) NH_3 ammonia or nitrogen trihydride
- e) CCl_4 carbon tetrachloride

2. Write the formulas for the following compounds:

- a) dinitrogen monoxide N_2O
- b) diphosphorous hexabromide P_2Br_6
- c) sulfur dioxide SO_2
- d) silicon tetrahydride SiH_4
- e) nitrogen diselenide NSe_2

3. Balance the following equations

- a) $8 \text{Br}_2 + 8 \text{K}_2\text{S} \rightarrow 16 \text{KBr} + \text{S}_8$
- b) $2 \text{C}_8\text{H}_{18} + 25 \text{O}_2 \rightarrow 16 \text{CO}_2 + 18 \text{H}_2\text{O}$
- c) $2 \text{NaCl} \rightarrow 2 \text{Na} + \text{Cl}_2$
- d) $\text{Na}_2\text{CO}_3 + \text{CaCl}_2 \rightarrow \text{CaCO}_3 + 2 \text{NaCl}$
- e) $2 \text{Fe}_2\text{O}_3 \rightarrow 4 \text{Fe} + 3 \text{O}_2$
- f) $2 \text{Al} + 6 \text{HCl} \rightarrow 3 \text{H}_2 + 2 \text{AlCl}_3$
- g) $\text{Au} + \text{HNO}_3 + 3 \text{HCl} \rightarrow \text{AuCl}_3 + \text{NO} + 2 \text{H}_2\text{O}$

4. Write the names of the following compounds:

- | | |
|--|---------------------|
| a) LiCl | lithium chloride |
| b) Mg ₃ P ₂ | magnesium phosphide |
| c) Ba(NO ₃) | barium nitrate |
| d) K ₃ PO ₄ | potassium phosphate |
| e) CsOH | cesium hydroxide |
| f) Ca ₃ (PO ₄) ₂ | calcium phosphate |
| g) FeO | iron (II) oxide |
| h) PbO ₂ | lead (IV) oxide |

5. Write the formulas for the following compounds:

- | | |
|------------------------|-----------------------------------|
| a) barium hydroxide | Ba(OH) ₂ |
| b) iron (II) fluoride | FeF ₂ |
| c) calcium sulfide | Ca ₂ S |
| d) copper (I) sulfate | Cu ₂ SO ₄ |
| e) cobalt (III) iodide | CoI ₃ |
| f) aluminum oxide | Al ₂ O ₃ |
| g) sodium carbonate | Na ₂ CO ₃ |
| h) iron (III) nitrate | Fe(NO ₃) ₃ |