

Answers

True/False

- 1. **True.** The H_2O molecule has a bent shape.
- 2. **False.** It looks like a pyramid with a lone pair at the apex.
- 3. **True.** The NH_3 molecule has a trigonal pyramidal shape.
- 4. **True.** The CH_4 molecule has a tetrahedral shape.
- 5. **True.** The BF_3 molecule has a trigonal planar shape.
- 6. **True.** The PCl_5 molecule has a trigonal bipyramidal shape.
- 7. **True.** The SF_6 molecule has a octahedral shape.
- 8. **True.** The ClO_4^- ion has a tetrahedral shape.
- 9. **True.** The SO_4^{2-} ion has a tetrahedral shape.
- 10. **True.** The SiO_4^{4-} ion has a tetrahedral shape.
- 11. **True.** The PO_4^{3-} ion has a tetrahedral shape.
- 12. **True.** The AsO_4^{3-} ion has a tetrahedral shape.
- 13. **True.** The $\text{S}_2\text{O}_4^{2-}$ ion has a tetrahedral shape.
- 14. **True.** The ClO_3^- ion has a trigonal pyramidal shape.
- 15. **True.** The ClO_2 molecule has a bent shape.
- 16. **True.** The ClO_2 molecule has a bent shape.
- 17. **True.** The ClO_2 molecule has a bent shape.
- 18. **True.** The ClO_2 molecule has a bent shape.
- 19. **True.** The ClO_2 molecule has a bent shape.
- 20. **True.** The ClO_2 molecule has a bent shape.