

Year 12 Chemistry
Quick Quiz: Elemental Chemistry

1. Write the electron configuration for copper.

2. Explain why an oxidation state of +7 is possible for bromine.

3. Write the likely covalences for the following elements:
 - (a) fluorine

 - (b) sulfur

4. Write an equation for the reaction of PbO_2 with HCl .

5. Write an equation to show how an oxide of nitrogen could display acidic characteristics.

6. State which of the following would react with SiO_2 : sodium hydroxide, water, sulfuric acid

7. For the following molecules, write the oxidation state of each element:
 - (a) P_4O_{10}
 - (b) SO_4^{2-}

8.
 - (a) Draw the NH_4^+ molecule. Name the shape.

 - (b) State what causes the N–H bonds in NH_4^+ to be polar.

 - (c) State why a molecule of NH_4^+ is non-polar.