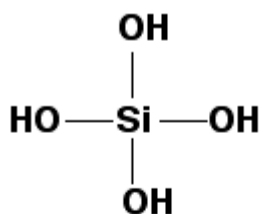


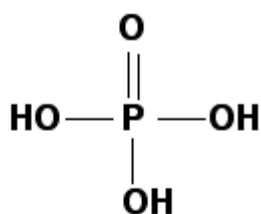
Chemguide – questions

PERIOD 3: PROPERTIES OF THE “HYDROXIDES”

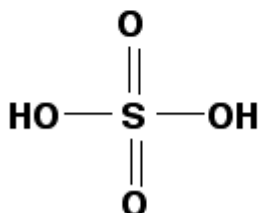
- Why are sodium and magnesium hydroxides basic?
 - Write an equation in each case to show their basic behaviour.
- Aluminium hydroxide is amphoteric. What does that mean?
 - Write two equations to illustrate your answer to (a).
- The “hydroxides” of the rest of the period all contain covalently bound OH groups and are all acids.



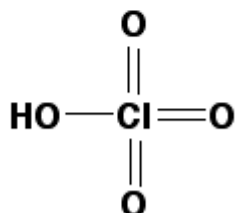
orthosilicic acid



phosphoric(V) acid



sulphuric acid



chloric(VII) acid

- How does acid strength vary as you go from the silicon to the chlorine compound?
- By reference to the ion formed when each of these compounds loses a hydrogen ion, explain the trend you described in part (a).