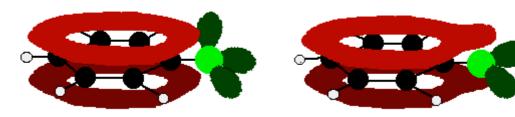
## Chemguide - questions

## **ARYL HALIDES: INTRODUCTION**

1. The Chemguide page has these two diagrams relating to chlorobenzene.



- a) Explain what is happening in the diagrams.
- b) How does the bonding shown in these diagrams affect the bond strength of the carbon-chlorine bond?
- c) How does the bonding affect the polarity of the molecule?
- 2. a) What is the major intermolecular force present in liquid aryl halides such as chlorobenzene, bromobenzene and iodobenzene?
  - b) Explain why the boiling points increase from chlorobenzene to bromobenzene to iodobenzene.
  - c) Why are all these aryl halides insoluble in water?