

29 The structure of benzene – Part 2 —Answers

Answers

Work through these after trying the questions yourself.

29.6 A flat, regular hexagon.

29.7 A delocalised π (pi) system.

29.8 They are all the same length.

29.9 Less.

29.10 It is more stable than expected.

29.11 Real benzene releases about 152 kJ mol^{-1} *less* than the three-double-bond model predicts. That means benzene started out *lower* in energy —more stable —than the model. The extra stability comes from the delocalised π ring.