Chemguide - answers

ARENES: FRIEDEL-CRAFTS REACTIONS

- 1. a) R-C where R is a hydrocarbon group.
 - b) Ethanoylation is a specific example of acylation where the acyl group is an ethanoyl group:

- c) React benzene with propanoyl chloride in the presence of aluminium chloride as a catalyst at about 60°C for about 30 minutes.
- d) CH₃
 COCH₃
- e) hydrogen chloride
- 2. a) React benzene with chloroethane in the presence of aluminium chloride as a catalyst at room temperature.
 - b) Substituting an alkyl group into the benzene ring makes the ring more reactive than it is in the original benzene, and so further alkyl groups get substituted as well.
 - c) CH₃