

## Chemguide – answers

### ALCOHOLS: THE TRIIODOMETHANE (IODOFORM) REACTION

1. a) *Either:* Add iodine solution followed by enough sodium hydroxide solution to remove the colour of the iodine. Warm very gently if nothing happens in the cold.

*Or:* Add potassium iodide solution followed by sodium chlorate(I) solution (sodium hypochlorite solution). Warm very gently if nothing happens in the cold.

b) You get a pale yellow precipitate with a faintly antiseptic smell.

c) It tests for the presence of the  $\text{CH}_3\text{CH}(\text{OH})-$  group.

d) B, D and G

I haven't asked specifically about the detailed chemistry of this reaction because I want you to concentrate on what is important for now. You may meet this reaction again when you do aldehydes and ketones, and I will test the chemistry a bit more then.