

- Describe two alternative methods by which a colloidal suspension could be stabilised, and one by which a stable suspension could be destabilised.

3

**Colloidal suspensions can be stabilised either electrostatically or sterically. Electrostatic repulsions between particles with the same charge can stabilise a suspension. The presence of an adsorbed polymer layer on the particles, can also stabilise the suspension because an entropic repulsion sets in between the polymer layers.**

**A suspension stabilised electrostatically can be destabilised by adding an electrolyte (e.g. NaCl), which decreases the repulsion between particles, causing the suspension to aggregate and precipitate. Heating or stirring vigorously can also destabilise a suspension by increasing the number of collisions between particles.**