

Question 27 (5 marks)

Describe the physical and chemical processes needed to purify and sanitise a town water supply. 5

There are four major processes required to purify and sanitise a town water supply. Flocculation is the first process, which involves the chemical reaction to produce a floc with the ions <sup>to be removed</sup> ~~to be removed~~. This is then scraped from the top of the water sample. The water is then placed in to a settling tank as impurities set and the top water is decanted in the process of sedimentation. Thirdly the water is passed through rocks and sand granules to remove any large components still remaining after sedimentation. Finally chlorination occurs where chlorine is added to kill bacteria in the water, or any microorganism capable of causing harm. This results in tap water sometimes smelling chlorine. Fluorine is then added to decay in childrens teeth.

