

	like calamine, the effect of acid is neutralised. c. acidic factory waste causes harm to aquatic animals. So to avoid it factory waste is neutralised.	
11.	Physical change	Chemical change
	1. No new product is formed.	1. New product formation.
	2. Smoke, light, heat are not produced.	2. Smoke, light, heat are produced.
	3. Example – cutting of wood.	3. example – burning of wood.
12.	a. Ruminants have an organ caecum which has specific bacteria for digestion of cellulose. But humans do not have caecum and bacteria for cellulose digestion. That's why humans can not digest cellulose. b. well labelled human digestive system.	2+3
13.	Photosynthesis – the process by which green plants synthesis their own food by utilising carbon dioxide from atmosphere, water minerals from soil in presence of chlorophyll and sunlight. Reaction – Carbon dioxide + water $\xrightarrow[\text{chlorophyll}]{\text{sunlight}}$ carbohydrates + oxygen Diagram Factors essential – 1. Carbon dioxide. 2. Water and minerals. 3. Sunlight. 4. Chlorophyll.	1+1+1+2
14.	Clinical thermometer has kink, which stops back flow of mercury when taken out of mouth. But laboratory thermometer does not have kink so it has to read within the object only.	2
15.	Neutralisation – the reaction between acid and base to give salt and water is called neutralisation. Example – Hydrochloric acid + sodium hydroxide \rightarrow sodium chloride + water	2
16.	Precaution while burning magnesium ribbon – 1. Rub it with sand paper to remove MgO layer. 2. Not to look directly on the light from burning ribbon. OR Physical change – tearing of paper. Chemical change – burning of paper.	2