| Describe the main steps in a titration                          | Why would a food company need to know how pure an ingredient was before using it?                           | pH14  | Label these<br>chemicals as bulk<br>(B) or fine (F)   | A pattern can be etched onto a zinc plate using hydrochloric acid to react with the zinc, forming soluble zinc chloride, ZnCl <sub>2</sub> . Write a word equation and a balanced symbol equation for the reaction. |   |
|---|---|---|---|---|---|
|   |   | pH10  | Aspirin   |   |   |
|   |   |   | Ethane  |   |   |
|   | Where do cobalt, rhodium and iridium appear in the periodic table?  | pH7   | Citral perfume  |   |   |
|   | _   | pH3   | Sulphuric acid  |   |   |
| Name some of the main products of the UK chemical industry.     |   |   | Herbicide<br>glyphosate                               |   |   |
|   | Why is it not surprising that these 3 metals can be used to make catalysts for                              | pH1   | Food dye carotene                                     | What are the 4 ways of speeding up a chemical reaction?   |   |
|   | the same process?   | Give an example<br>of a chemical for<br>each pH | Alkali sodium<br>hydroxide                            |   |   |
|   |   | C6<br>Chemical Synthesis                        |   |   |   |
| Name the 4 main raw materials used in the UK chemical industry. | What does the pH scale show us and what does it measure?  |   | nd diagrams to<br>it useful                           | What is a catalyst?   | Draw an energy level diagram for an exothermic reaction, label  |
|   |   | What pH is a strong acid?                       | Uses of sodium chloride include:                      |   | reactants and products.   |
|   | Give the name and chemical What   | makes and acid an acid?                         | Flavouring food                                       | In an exothermic reaction, is heat taken into or out of   |   |
|   | formula of a bulk chemical  | makes and deld an deld:                         | Melting ice on roads                                  | the system?   |   |
|   |   |   | Saline drips in hospitals                             |   |   |
| What are the formulas of these antacids:                        |   |   | Which is the  | In an endothermic reaction, is heat taken into or out of the system?  | Draw an energy level diagram for an endothermic reaction, label |
| Magnesium hydroxide   |   |   | purest grade?   |   | reactants and products.   |
|   | Write an equation for the neutralisation reaction between sodium hydroxide hydroxide and hydrochloric acid. |   | What is the formula and charge of the following ions? |   |   |
| Aluminium hydroxide   |   |   | Carbonate   |   |   |
|   |   |   | Nitrate   |   |   |
|   |   |   | Hydroxide   |   |   |