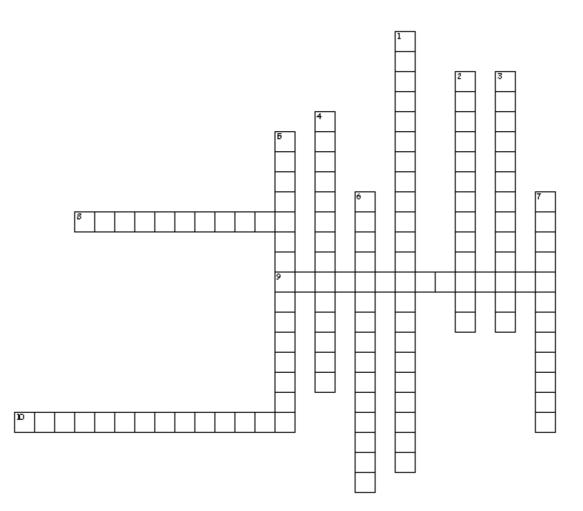
Question 1: Salts-Crossword-1



Across

- 8. Only water-soluble salt of lead
- 9. This salt produces nitrous oxide (laughing gas) on heating along with water

10. A salt insoluble in dilute HCl but soluble in aqueous NH₃

Down

- 1. The brown ring compound in ring test for nitrates
- 2. A salt soluble in hot water but insoluble in cold water
- 3. A solid crystalline salt which produce nitrogen dioxide, and oxygen gas on heating
- 4. A water-soluble oxide of period four element that is basic

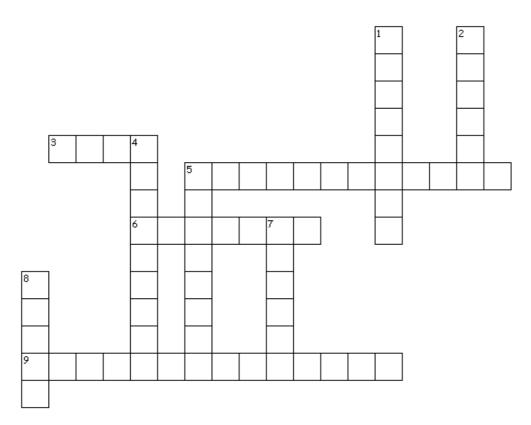
5. The salt is green in colour when heated produces a gas which turn limewater milky and the salt turns black

- 6. A solid crystalline salt produces nitrogen on heating
- 7. A yellow colour salt in solution that does not get dissolved in concentrated NH₃

Question 2: Answer the following:

- 1. Write balanced equations for nitric acid formation during thunderstorm. (3 steps)
- 2. Name a solution which gives nitrogen dioxide with copper
- 3. Write a balanced equation for action of heat on ammonium nitrate.
- 4. Give a reaction between concentrated HNO₃ and copper turning
- 5. Write a balanced equation between sulphur and hot conc. Nitric acid.
- 6. Name two metal nitrates which produces only one gas on heating
- 7. Write balanced equation for action of heat on sodium, potassium and copper nitrate.
- 8. Write balanced equation for action of heating nitrogen monoxide and oxygen

Question 3: Alloys-Crossword-1



Across

- 3. Soldering alloy is an alloy of ______ where another metal tin is mixed
- 5. An alloy of Cu (50%), Zn (30%) and Ni (20%)
- 6. This is a type of alloy in which base metal is mercury
- 9. This is an alloy of iron nickel and chromium, used as cutlery,

Down

- 1. A salt of aluminium mixed with bauxite to reduce melting temperature
- 2. An alloy that is made by mixing 20% tin with 80% copper
- 4. An alloy with Al (95%), Cu (4%), Mn (0.4%), and Mg (0.4%), used in aircraft
- 5. A non-metal, conducts electricity in its solid state
- 7. Product of two metals, fused together (plural)
- 8. An alloy made by mixing roughly 60% copper with 40% zinc

Question 4: Answer the following:

- 1. Give name of a substance which produced a gas which turns limewater milky from HNO_3
- 2. Why HNO₃ leaves a yellow colour when left standing in an ordinary glass bottle?
- 3. Give name of a substance that converts Sulphur into sulphuric acid directly.
- 4. Write balanced equations for preparation of nitric acid from potassium nitrate. (2 steps)
- 5. Give name of a substance, which produces a brown gas in presence of copper turnings.
- 6. Name three nitrates that produces coloured residue, on heating. Also state the colour of the residue with the balanced chemical equation for the above three reactions.