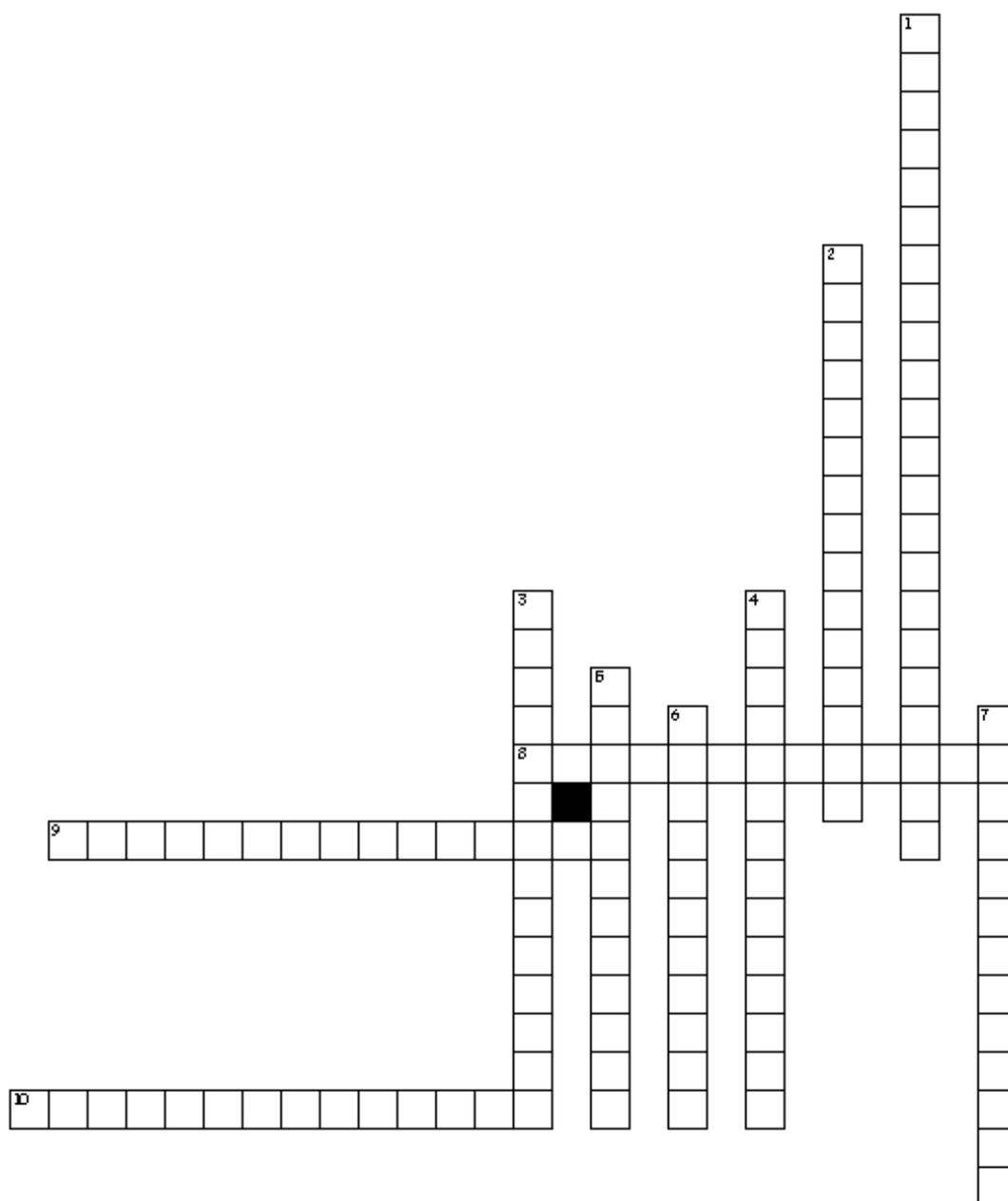


### Question 1: Salts-Crossword-2



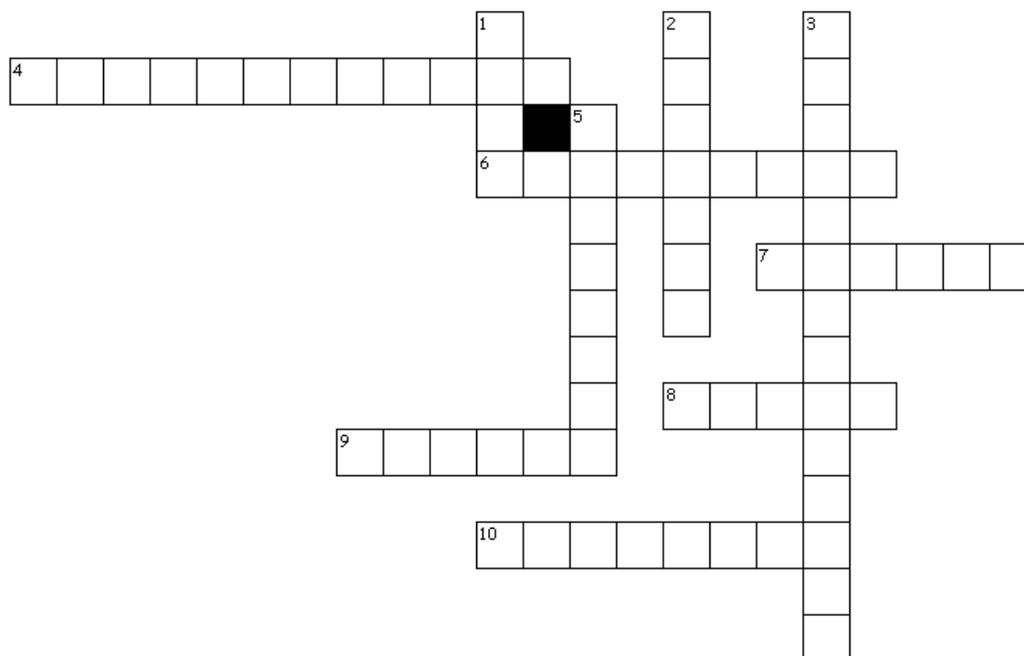
#### Across

8. A solid crystalline salt which produce nitrogen dioxide, and oxygen gas on heating
9. A solid crystalline salt produces nitrogen on heating
10. A salt insoluble in dilute HCl but soluble in aqueous  $\text{NH}_3$

#### Down

1. The brown ring compound in ring test for nitrates
2. The salt is green in colour when heated produces a gas which turn limewater milky and the salt turns black
3. A water-soluble oxide of period four element that is basic
4. This salt produces nitrous oxide (laughing gas) on heating along with water
5. A yellow colour salt in solution that does not get dissolved in concentrated  $\text{NH}_3$
6. Only water-soluble salt of lead
7. A salt soluble in hot water but insoluble in cold water

## Question 2: Alloys-Crossword-2



### Across

- An alloy of Cu (50%), Zn (30%) and Ni (20%)
- An alloy with Al (95%), Cu (4%), Mn (0.4%), and Mg (0.4%), used in aircraft
- Product of two metals, fused together (plural)
- An alloy made by mixing roughly 60% copper with 40% zinc
- An alloy that is made by mixing 20% tin with 80% copper
- A salt of aluminium mixed with bauxite to reduce melting temperature

### Down

- Soldering alloy is an alloy of \_\_\_\_\_ where another metal tin is mixed
- This is a type of alloy in which base metal is mercury
- This is an alloy of iron nickel and chromium, used as cutlery,
- A non-metal, conducts electricity in its solid state

## Question 3: Answer the following:

- Give name of a substance which produced a gas which turns limewater milky from  $\text{HNO}_3$
- Why  $\text{HNO}_3$  leaves a yellow colour when left standing in an ordinary glass bottle?
- Give name of a substance that converts Sulphur into sulphuric acid directly.
- Write balanced equations for preparation of nitric acid from potassium nitrate. (2 steps)
- Give name of a substance, which produces a brown gas in presence of copper turnings.
- 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.
- Write balanced equations for nitric acid formation during thunderstorm. (3 steps)
- Name a solution which gives nitrogen dioxide with copper
- Write a balanced equation for action of heat on ammonium nitrate.
- Give a reaction between concentrated  $\text{HNO}_3$  and copper turning
- Write a balanced equation between sulphur and hot conc. Nitric acid.
- Name two metal nitrates which produces only one gas on heating
- Write balanced equation for action of heat on sodium, potassium and copper nitrate.
- Write balanced equation for action of heating nitrogen monoxide and oxygen