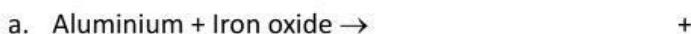


9Fd – Displacement

1. Answer the following questions.



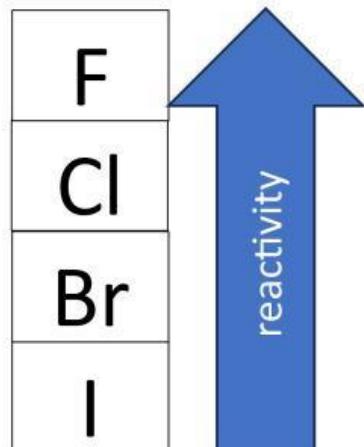
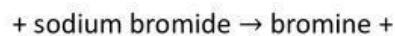
b. State the type of reaction that occurs.

2. The diagram shows the reactivity series of the halogens.

a. To extract bromine from sodium bromide, another halogen is used.

Suggest which halogen is used.

b. Complete the equation for this reaction.



3. Four metals, W, X, Y and Z, were placed in solutions of the sulfates of these same four metals. They were observed to see whether a reaction took place. The results are shown in the table.

| Metal sulfate solution | Metal W | Metal X | Metal Y | Metal Z |
|------------------------|-------------|----------|-------------|-------------|
| W sulfate | | reaction | no reaction | reaction |
| X sulfate | no reaction | | no reaction | no reaction |
| Y sulfate | reaction | reaction | | reaction |
| Z sulfate | no reaction | reaction | no reaction | |

Use the data to put the metals into a reactivity series, with the most reactive metals first.

Nickname:

Date:

Class

4. The table shows a 'confidence grid'. Choose "Yes" in one box for each statement in the table.

| Statement | Definitely correct | Might be correct | Might be wrong | Definitely wrong |
|--|--------------------|------------------|----------------|------------------|
| In a compound, less reactive metals always displace more reactive metals | | | | |
| A spark is always needed to start a displacement reaction. | | | | |
| Displacement reactions only work one way. | | | | |
| Bromine is extracted from sea water using chlorine. | | | | |