

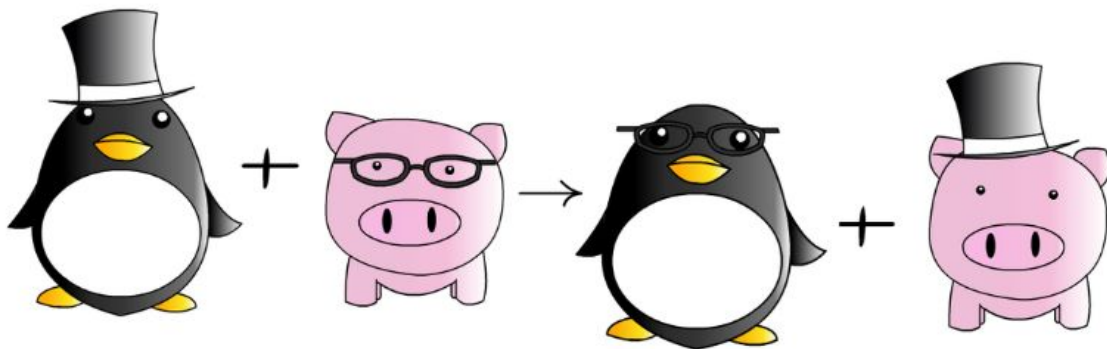
WorksheetCloud: MEMORANDUM

Grade 9

Subject: Natural Sciences

Topic: Acids and metal oxide

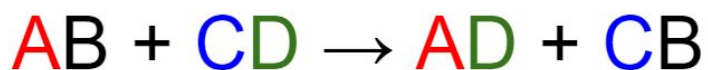
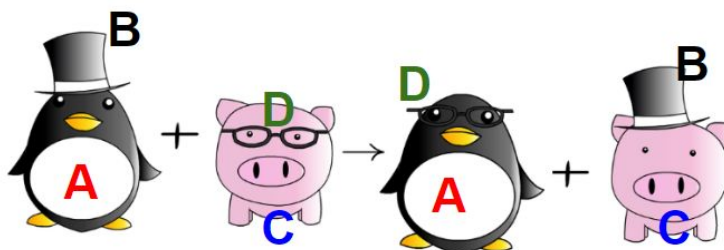
Activity 1



1. Using the penguin and pig chemical reaction explain how an exchange reaction works.

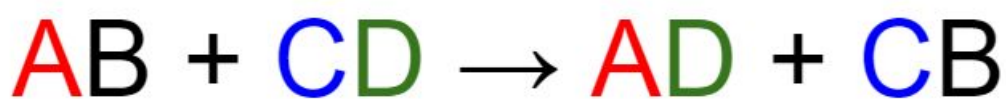
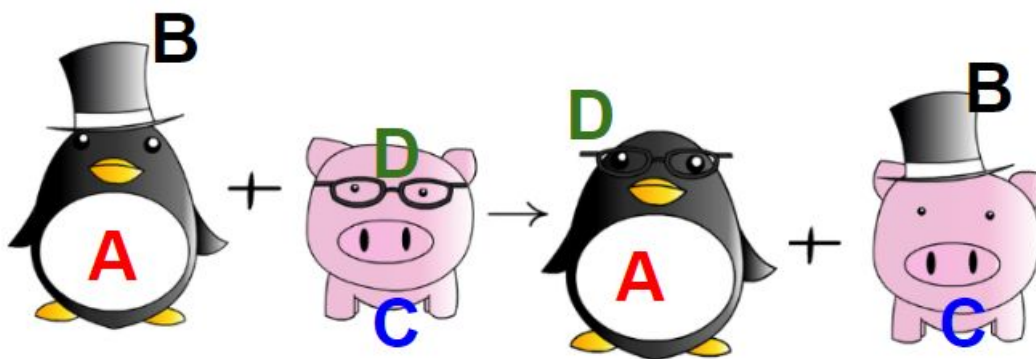
Mention penguin, pig, hat and spectacles are elements or compounds in a chemical reaction

Elements/compounds/atoms recombine in a chemical reaction

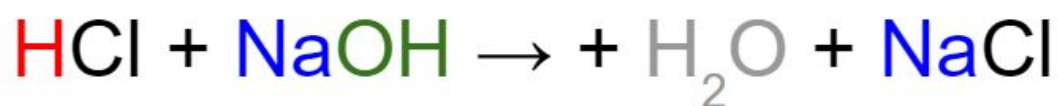
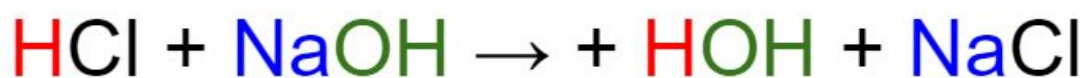
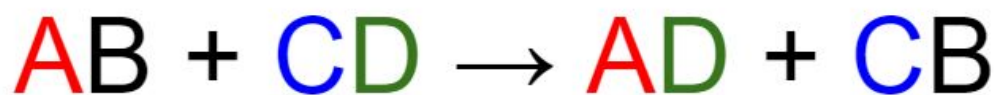
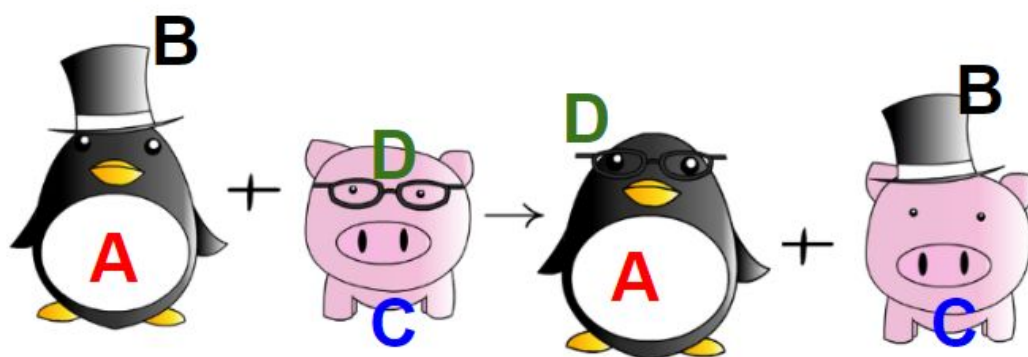


AB and CD are undergoing an exchange reaction

2. Using the penguin and pig chemical reaction explain how it links with a neutralization reaction.



acid + base \rightarrow salt + water



Activity 2

The reaction between hydrochloric acid and magnesium oxide [4 marks]

Word equation	hydrochloric acid + magnesium oxide → magnesium chloride + water
Chemical equation	$2 \text{HCl} + \text{MgO} \rightarrow \text{MgCl}_2 + \text{H}_2\text{O}$
General equation	acid + metal oxide → salt + water

Activity 3

Define neutralization

- When an acid and a base are mixed, the acid will lose some of its 'acidity' and the base will lose some of its 'basicity'.
- If they are mixed in the right amounts, they will neutralise each other.
- The products of the reaction will be a salt and water.