

Revision Sheet | Lower Secondary

Stage (6-8)

1st Semester | 2023-2024

Subject: Chemistry

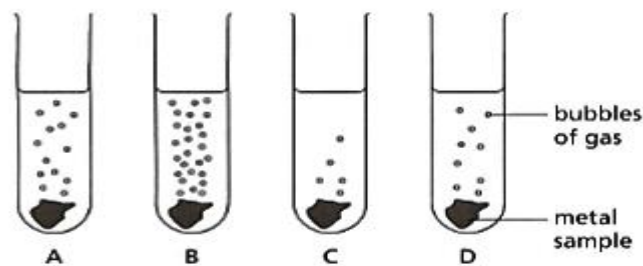
Chapter: 7

Objectives:

- To solve questions about reactivity of metals with water and oxygen

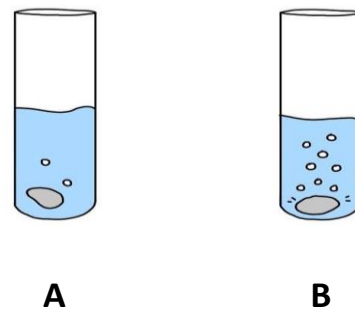
Question one:

The diagram shows some metals reacting with cold water.



1. Give a sign of a chemical reaction in these test tubes.
2. What is the name of the gas produced?
3. How can you decide which metal is the most reactive?
.....
4. Test tubes A & D have magnesium and calcium reacting with water.
 - Which test tube has calcium in it?
5. How can you make the reaction in test tube C faster?
.....
6. Test tube B has strontium (a metal in group 2) in it.
 - a. Does strontium have high or low density?
 - b. Write the word equation of the reaction of strontium with water.
.....

Question two: A student is investigating the reactivity of zinc with water, as shown in the diagram.



He did the reaction twice, at the beginning with cold water, then with hot water.

1. Which test tube shows the results of testing zinc with hot water?
.....
2. If a drop of phenolphthalein was added to both test tubes, will the indicator give the same shade of pink?
- Explain your answer.
3. Name a metal that is less reactive than zinc.

Question three:

Fill in the word equations below with the missing reactant(s)/ product(s)

1. iron + → iron oxide
2. sodium+ water → + hydrogen
3. + → zinc oxide
4. Potassium + water → +

Answer Key

Question one:

1. Production of bubbles
 2. Hydrogen gas
 3. By comparing the amount of gas produced
 4. Test tube D
 5. Heat the water
 6. High density
- Strontium + water → strontium hydroxide + hydrogen

Question two:

1. Test tube B
2. No, because zinc has different rate of reactivity with cold and hot water
3. Iron/ copper/ gold (choose any one)

Question three:

1. oxygen
2. sodium hydroxide
3. zinc + oxygen
4. Potassium hydroxide + hydrogen