

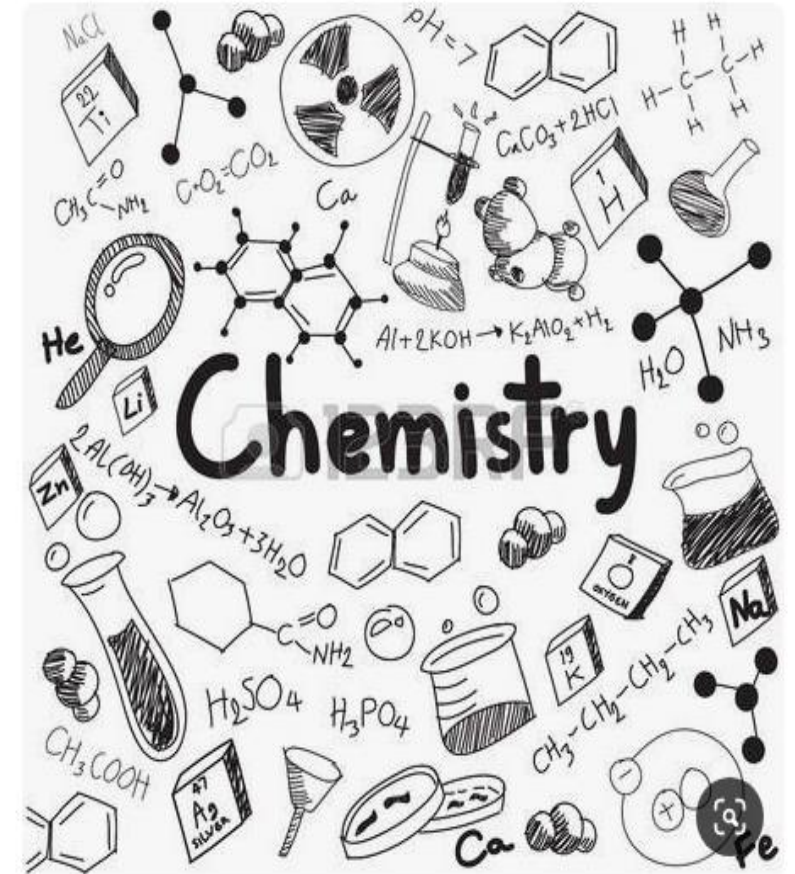
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- Lesson : (Reactivity of metals 2)
- Scholastic Year: 2023-2024
- Grade: 7CS



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Objective:

1. To describe reactions of metals with water and oxygen (Groups 1&2)

NOTE: LINKS FOR THE REACTIONS ARE ATTACHED TO HELP YOU IN YOUR STUDYING. YOU DON'T NEED TO MEMORIZE THEM.



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Understanding reactivity with oxygen

<https://www.youtube.com/watch?v=RA3rQ2JXtLI&list=PPSV>

Metal	Symbol	Appearance	Observation
Magnesium	Mg	Grey colour	Strong reaction, a white flash appeared after burning it. It changed into a white powder which is magnesium oxide.
Copper	Cu	Red- brown colour	A thin layer of grey color formed on the surface (copper oxide) An orange flame appeared during the test.
Iron	Fe	Grey colour	White flash appeared during the test. The colour of iron wool changed into black forming iron oxide.
Zinc	Zn	Shiny silver colour	Orange flame is formed After burning, some of the zinc changed into white powder which is zinc oxide (size of the sample had changed)



Mg



Cu



Fe



Zn

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Understanding reactivity with water/ steam

Metal	Observations in water
Calcium https://www.youtube.com/watch?v=QDKkdhXGv5c	calcium metal begins to bubble vigorously as it reacts with water, producing hydrogen gas, and calcium hydroxide. Rise in temperature (exothermic reaction) Reactions of metals with water, steam, and acid - YouTube
Magnesium https://www.youtube.com/watch?v=1oscKlyi_pY	Magnesium reacts slowly with cold water forming small bubbles on the surface of the ribbon. Many bubbles are formed when heated. Reaction of Magnesium and Water - YouTube
Zinc (aluminium/ iron) https://www.youtube.com/watch?v=dBGx2PFhoGw	Slow reaction with cold water (The color of indicator changes slowly) then the reaction gets faster with hot water, but less bubbles are produced comparing to magnesium What happens when zinc reacts with hot water - YouTube
Sodium https://www.youtube.com/watch?v=jl_JY7pqOM	Vigorous reaction with cold water, rapid change in color of the indicator, fizzing on the surface, hydrogen gas given out, exothermic reaction Alkali Metals Reacting with Water - YouTube



Ca



Mg



Zn



Na

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Thank you